U.S. ARMY SERGEANTS MAJOR ACADEMY (ANCOC)

W425 OCT 03

PLATOON TACTICAL OPERATIONS

TRAINING SUPPORT PACKAGE

TRAINING SUPPORT PACKAGE (TSP)

TSP Number / Title	W425 / PLATOON TACTICAL OPERATIONS
Effective Date	01 Oct 2003
Supersedes TSP(s) / Lesson(s)	W402, Platoon Tactical Operations, Oct 02
TSP Users	600-ANCOC-TATS, Advanced Noncommissioned Officer Course
Proponent	The proponent for this document is the Sergeants Major Academy.
Improvement Comments	Users are invited to send comments and suggested improvements on DA Form 2028, *Recommended Changes to Publications and Blank Forms.* Completed forms, or equivalent response, will be mailed or attached to electronic e-mail and transmitted to: COMDT USASMA ATTN ATSS D BLDG 11291 BIGGS FIELD FORT BLISS TX 79918-8002 Telephone (Comm): (915) 568-8875 Telephone (DSN): 978 -8875 E-mail atss-dcd@bliss.army.mil
Security Clearance / Access	Unclassified
Foreign Disclosure Restrictions	FD5. This product/publication has been reviewed by the product developers in coordination with the USASMA foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

PREFACE

Purpose

This Training Support Package provides the instructor with a standardized lesson plan for presenting instruction for:

Task Number	Task Title
Individual	
071-326-3013	Conduct a Tactical Road March
071-326-5775	Coordinate with an Adjacent Platoon
071-326-5805	Conduct a Route Reconnaissance Mission
071-430-0006	Conduct a Defense by a Platoon
071-430-0007	Consolidate a Platoon Following Enemy Contact While in the Defense
071-430-0008	Reorganize a Platoon Following Enemy Contact While in the Defense
191-379-4450	Supervising Handling of Enemy Personnel and Equipment at Unit Level
551-721-4326	Perform Duties as a Convoy Commander

This TSP Contains

TABLE OF CONTENTS

PLATOON TACTICAL OPERATIONS
W425 / Version 1
1 Oct 2003

SECTION I. ADMINISTRATIVE DATA

All Courses Including This Lesson

Course Number	Version	Course Title
600-ANCOC-TATS	1	Advanced Noncommissioned Officer Course

Task(s) Taught(*) or Supported

Task Number	Task Title
Individual	
071-326-3013 (*)	Conduct a Tactical Road March
071-326-5775 (*)	Coordinate with an Adjacent Platoon
071-326-5805 (*)	Conduct a Route Reconnaissance Mission
071-430-0006 (*)	Conduct a Defense by a Platoon
071-430-0007 (*)	Consolidate a Platoon Following Enemy Contact While in the Defense
071-430-0008 (*)	Reorganize a Platoon Following Enemy Contact While in the Defense
191-379-4450 (*)	Supervising Handling of Enemy Personnel and Equipment at Unit Level
551-721-4326 (*)	Perform Duties as a Convoy Commander

Reinforced Task(s)

Task Number	Task Title
None	

Academic Hours

The academic hours required to teach this lesson are as follows:

	Resident Hours/Methods	
	5 hrs	/ Conference / Discussion
Test	0 hrs	
Test Review	0 hrs	
Total Hours:	5 hrs	

Test Lesson Number

	Hours	Lesson No.
Testing (to include test review)		N/A

Prerequisite Lesson(s)

Lesson Number	Lesson Title
None	

Clearance Access

Security Level: Unclassified
Requirements: There are no clearance or access requirements for the lesson.

Foreign Disclosure Restrictions

FD5. This product/publication has been reviewed by the product developers in coordination with the USASMA foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

References

Number	Title	Date	Additional Information
FM 21-18	FOOT MARCHES THIS ITEM IS INCLUDED ON EM 0019	01 Jun 1990	
FM 6-22.5	Combat Stress	23 Jun 2000	
FM 7-7	THE MECHANIZED INFANTRY PLATOON AND SQUAD (APC)	15 Mar 1985	
FM 7-8	INFANTRY RIFLE PLATOON AND SQUAD	22 Apr 1992 C1, 1 Mar 2001	
STP 21-24-SMCT	SOLDIER'S MANUAL OF COMMON TASKS (SMCT) SKILL LEVELS 2-4	1 Apr 2003	

Student Study Assignments

Before class

Read student handout 1, Appendix D, FM 6-22.5, Chapter 4; FM 7-7, Appendix Q (pages Q-6 thru Q-8); FM 7-8, pages 1-10, 2-2, 2-3, 2-8, 2-21, 2-58, 2-70, 2-76, 2-80 thru 2-82, 2-85, 5-22 and 5-23; FM 21-18, pages 3-1 thru 3-7 and pages 4-1 thru 4-15; and STP 21-24 SMCT, page 3-166, pages 3-219 thru 3-220, 3-241 thru 3-243, 3-264, 3-303 thru 3-307 for reading and study assignments.

During class—

Participate in classroom discussion.

After class—

Turn in recoverable references after the examination for this lesson.

Additional Support Personnel Requirements

Name	Stu Ratio	Qty	Man Hours
None			

Equipment Required for instruction

ID Name	Stu Ratio	Instr Ratio	Spt	Qty	Exp
FSC-10 INFOCUS LCD PROJECTOR	16:1		No	0	No
FSC-11 PROJECTION SCREEN	16:1		No	0	No
FSC-4 TV MONITOR 32 INCH	16:1		No	0	No
FSC-6 WINDOWS OS, MICROSOFT INTERNET EXPLORER, MSOFFICE, FTP SITE SOFTWARE	16:1		No	0	No
FSC-7 VIEWGRAPH OVERHEAD PROJECTOR	16:1		No	0	No
FSC-8 WHITE BOARD	16:1		No	0	No

* Before Id indicates a TADSS

Materials Required

Instructor Materials:

- One computer, with mouse, and one projector screen per classroom.
- 18 Visual Aids

Student Materials:

- Reading material listed above
- Pencils and writing paper

Classroom, Training Area, and Range Requirements

CLASSROOM INSTRUCTION 900 SF, 16 PN or Classroom Conducive to Small Group Instruction of 16 Students.

Ammunition Requirements

Id	Name	Exp	Stu Ratio	Instr Ratio	Spt Qty
None					

Instructional Guidance

NOTE: Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

- Familiarize yourself with all lesson materials
- During class follow the guidelines in the TSP
- Students will be evaluated in their ability to supervise platoon tactical operations during the phase II FTX

Proponent Lesson Plan Approvals	Name	Rank	Position	Date
	Melanson, Mark	CIV	Training Specialist	1 Oct 2003
	Eichman, Guy A.	MSG	Course Chief	1 Oct 2003
	Lawson, Brian H.	SGM	Chief, NCOES	1 Oct 2003
	Mays, Albert J.	SGM	Chief, CDDD	1 Oct 2003

SECTION II. INTRODUCTION

Method of Instruction: Conference / Discussion
Technique of Delivery: Small Group Instruction (SGI)
Instructor to Student Ratio is: 1:16
Time of Instruction: 5 mins
Media: VGT-1and VGT-2

Motivator **SHOW VGT-1, PLATOON TACTICAL OPERATIONS**

As leaders, you must fight, survive, and win on the battlefield. To do this, you will have to shoot, move, communicate, secure, implement force protection, and sustain, and do it very quickly. Also, you will have to know not only your responsibilities, but those of your leaders and subordinates as well.

The way you conduct platoon tactical operations will determine whether you and your soldiers survive or die on the battlefield.

REMOVE VGT–1

Terminal Learning Objective

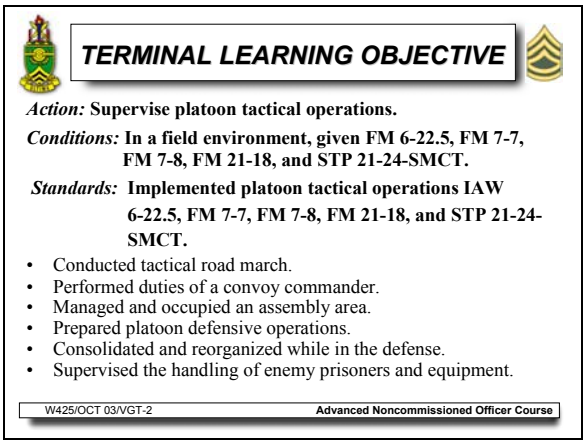
NOTE: Inform the student of the following Terminal Learning Objective (TLO) requirements.

At the completion of this lesson, you will--

Action:	Supervise platoon tactical operations.
Conditions:	In a field environment, given FM 6-22.5, FM 7-7, FM 7-8, FM 21-18, and STP 21-24-SMCT.
Standards:	Implemented platoon tactical operations IAW FM 6-22.5, FM 7-7, FM 7-8, FM 21-18, and STP 21-24-SMCT. • Conducted tactical road march. • Performed duties of a Convoy Commander. • Managed and occupied as assembly area. • Prepared platoon defensive operations • Consolidated and reorganized while in the defense. • Supervised the handling of enemy prisoners and equipment.

TLO, continued

SHOW VGT-2, TERMINAL LEARNING OBJECTIVE



REMOVE VGT-2

Safety Requirements

None

Risk Assessment Level

Low

Environmental Considerations

None

Evaluation

You will take a 50-question, written examination. The examination will include questions on the ELOs and TLO from this lesson. You must correctly answer 35 questions or more to receive a passing score (70 percent). This is a graduation requirement.

Instructional Lead-In

This lesson reinforces instruction concerning troop-leading procedures. This lesson will give you a better understanding of platoon tactical operations skills. During this lesson we will discuss those critical combat tasks that relate to controlling a platoon during a tactical road march, continuous operations, consolidation and reorganization, occupation and management of an assembly area, platoon defensive operations, and supervising the handling of enemy personnel and equipment.

SECTION III. PRESENTATION

NOTE: Inform the students of the Enabling Learning Objective requirements.

A. ENABLING LEARNING OBJECTIVE

Action:	Identify the skills required to supervise a platoon tactical road march.
Conditions:	As a platoon sergeant in a classroom environment.
Standards:	Identified the skills required to supervise a platoon tactical road march as stated in FM 7-8 and FM 21-18.

1. Learning Step / Activity 1. Troop Leading Procedures
Technique of Delivery: Small Group Instruction
Method of Instruction: Conference / Discussion
Instructor to Student Ratio: 1:16
Time of Instruction: 45 mins
Media: VGT-3 thru VGT-5

In order to conduct a successful road march, you apply troop-leading procedures as soon as you receive a mission. You should also consider what supplies and equipment you need and what special tasks you have to assign.

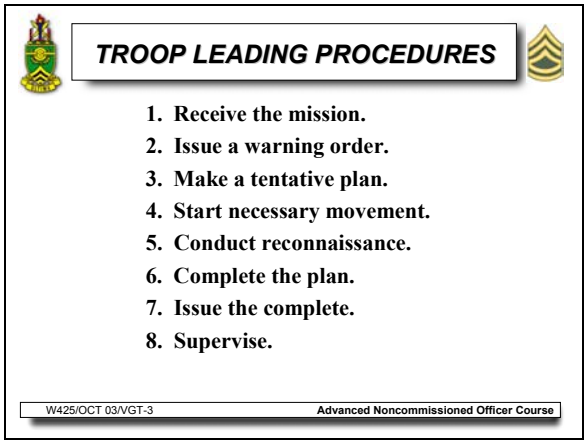
Troop leading is the process a leader goes through to prepare his unit to accomplish combat missions or tactical operations. You will begin the process again upon receiving a change to the mission or a new mission. Let's briefly review the troop leading procedures.

Ref: FM 7-8, p 2-3, para 2-2

QUESTION: What are the eight troop-leading procedures?

ANSWER**:** See VGT–3

SHOW VGT-3, TROOP LEADING PROCEDURES



Ref: FM 7-8, p 2-3, para 2-2

Steps 3 through 8 may not follow a rigid sequence. You may perform some of these procedures, also known as steps, throughout the operation. You use these procedures to ensure you leave nothing out of the planning and preparation and to ensure your soldiers understand the unit mission and prepare adequately for it.

NOTE: IAW FM 3-0, the first five factors are not new. However, the nature of full spectrum operations requires commanders to assess the impact of nonmilitary factors on operations. Because of this added complexity, *civil considerations* have been added to the familiar METT-T to form METT-TC.

Immediately upon receiving the mission, you must begin analyzing it using the factors of mission, enemy, terrain, troops, time available, and civil considerations (METT-TC). You will base your analysis of METT-TC on:

- What is the **mission**
- What do you know about the **enemy**
- How will the **terrain** and weather affect operation/mission
- What **troops** are available
- How much **time** is available
- What are the **civil** considerations.

Road March

The purpose of a road march is to relocate troops and equipment. A successful march is when the troops arrive at their destination at the prescribed time and are physically able to perform their tactical mission.

As in any operation, planning is the key to success in conducting a road march. Even supervising the road march at the platoon and squad level requires planning. The formation, interval, and rate of march all depend on the length of the march, the time allowed, the likelihood of enemy contact, the terrain and weather, the condition of the troops, and the weight of equipment carried.

Ref: FM 21-18, p 3-1, para 3-1

REMOVE VGT-3

As a platoon sergeant, you will base your march plan on the battalion or company march plan and organize it in accordance with the following sequence.

a. Receive the mission.
b. Prepare and issue the warning order.
c. Make an estimate of the situation.
d. Develop detailed movement plans.

e. Issue road movement orders.
f. Organize and dispatch a reconnaissance party.
g. Organize and dispatch a quartering party.

NOTE: Briefly discuss each of the steps in the sequence.

In order to properly execute a road march, you must establish an effective organization and be able to accomplish critical tasks. This includes proper security measures, a standard means of communications, and a contingency for reaction to enemy contact. This will help ensure the road march is flexible to any changes and responsive to the commander's needs. Usually a platoon will march as part of the company in columns with one file on each side of the road.

QUESTION: What are the elements of a road march?

ANSWER: See VGT-4

Ref: FM 21-18, p 4-2, figure 4-1

Elements

SHOW VGT-4, ELEMENTS OF A ROAD MARCH

Ref: FM 21-18, p 4-2

QUESTION: What is the purpose of the reconnaissance party?

ANSWER: To reconnoiter the route of march to determine travel time; capacity of underpasses and bridges; locations of culverts, ferries, and fords; and to identify critical points and obstacles.

Ref: FM 21-18, p 4-1, para 4-1a

To perform its mission effectively, the reconnaissance party should receive specific instructions, such as the type and extent of information required, and the time and place to submit their report.

QUESTION: What is the purpose of the quartering party?

ANSWER: To prepare a new area for the systematic arrival of units, and to guide march elements to their proper location.

Ref: FM 21-18, p 3-7, para 3-1g

The quartering party consists of the quartering party of each squad. The PLDR/PSG dispatches a quartering party to reconnoiter the new area and guide march elements into position. The quartering party leader must prepare a plan to guide each squad to its location. Guides must understand and rehearse this plan in order to prevent congestion and delays near the release point (RP) at the new area.

QUESTION: What does the main body consist of?

The main body consists of individual march units, march serials, and march columns.

Ref: FM 21-18, p 4-2

Each march unit is responsible for reconnoitering the route it will take to reach the designated start point (SP) and for determining the exact time it will take them to reach the SP. The movement order states the time each unit must arrive and clear the SP; therefore, arriving on time is critical.

QUESTION: What is the purpose of the trail party?

ANSWER: The trail party is the last march unit, and it is responsible for recovering disabled vehicles and stragglers.

Ref: FM 21-18, p 4-3, para 4-1c

The battalion maintenance officer leads the trail party, which consists of medical and maintenance personnel. Maintenance personnel must repair or tow disabled vehicles whenever possible. If you must leave a disabled vehicle behind, move it off the road into a secure area. The driver or crew members stay with the vehicle with enough food and water to last until you can recover the vehicle.

Medical personnel are responsible for providing medical care to those stragglers who require it. Medical personnel must, however, maintain march unit discipline while treating casualties.

To maintain accountability the medical personnel must notify the S1 of all personnel picked up.

When the trail party completes the road march, the battalion's first priority is to recover vehicles left behind and to return stragglers to parent units. A tactical road march is complete once there is totally accountability for all march units, vehicles, and personnel.

REMOVE VGT-4

Security

During a road march, commanders maintain security through observation, weapons orientation, dispersion, and camouflage. Commanders assign sectors of observation to their troops to obtain 360-degree observation.

Ref: FM 21-18, page 4-4, para 4-2

Communications

Leaders use various means of communications to control their troops, to gather or send out information, and to request support. A company needs to establish communications with its platoons and a platoon needs to establish communications with its squads. Communications are every soldier's responsibility.

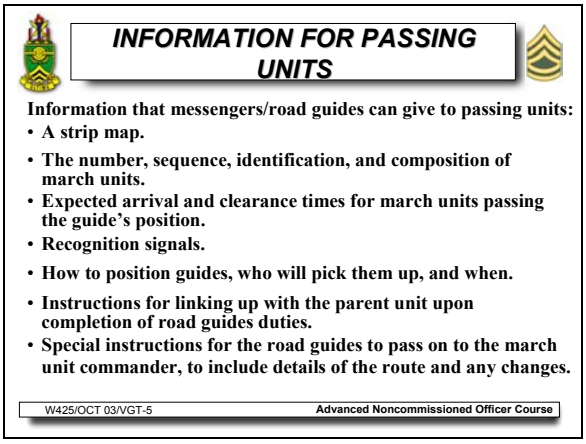
QUESTION: What is the primary means of communications during a tactical road march?

ANSWER: Messengers are the primary means of communications; however, you can use visual signals and road guides.

Ref: FM 21-18, page 4-7, para 4-4

Since the enemy has good direction-finding equipment, you should use the radio only in emergencies or when no other means of communication is available. You can use road guides to pass messages from one march unit to another. Because of the need to stay off the radio, you may need road guides to control the speed and interval of march units. When used, road guides should have enough information to control movement. The information you need to give them depends upon the friendly and enemy situation.

SHOW VGT-5, INFORMATION FOR PASSING UNITS



Ref: FM 21-18, page 4-8, para 4-4b

Terrain, weather, and the enemy situation influence the distance between soldiers and units during a road march. When soldiers march on roads in the daytime, the distance between soldiers will vary from 2 to 5 meters to provide dispersion and space for marching comfort. A distance of more than 5 meters increases the length of the column too much and hinders control. At night, commanders should reduce the distance to 1 to 3 meters. The tactical situation, however, could require changes to these distances. Normal distance between platoons is 50 meters and 100 meters between companies. To improve unit control during reduced visibility, the commander can decrease the distance to 25 meters between platoons and 50 meters between companies.

Ref: FM 21-18, p 4-10, para 4-7

REMOVE VGT-5

NBC Considerations

Another area that leaders must consider when planning a road march is the possibility of Nuclear, Biological, and Chemical (NBC) attacks. Planning considerations should include proper distribution of NBC protective and decontamination materials, establishing proper Mission-Oriented Protective Posture (MOPP) level, and avoidance of contaminated areas. You must accomplish detailed planning for the decontamination of march units that must move through

contaminated areas to reduce losses and excessive delays. Make every effort to avoid contaminated areas.

NOTE: Refer students to FM 21-18, page 4-11, para 4-8. Discuss each protective measure and clarify as necessary.

Supervision

As the platoon sergeant, you assist the platoon leader in the conduct of the foot march as directed. This includes activities before, during, and after the road march. You supervise the inspection of soldiers during halts and control straggling, as well as coordinate with the company supply sergeant for the replenishment of food, water, and medical supplies. You should conduct a risk assessment before the road march and an after action review after the road march. You must also be familiar with the duties of the platoon leader so you can act in his behalf during his absence.

Ref: FM 21-18, pages 4-15 thru 4-16

NOTE: Briefly discuss the platoon leader's responsibilities shown in FM 21-18, pages 4-14 and 4-15.

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: What is the normal sequence to follow when organizing a march plan?

ANSWER: The plan is normally organized in accordance with the following sequence.

1. Receive the mission.
2. Prepare and issue the warning order.
3. Make an estimate of the situation.
4. Develop detailed movement plans.
5. Issue road movement orders.
6. Organize and dispatch a reconnaissance party.
7. Organize and dispatch a quartering party.

Ref: FM 21-18, page 3-1, para 3-1a thru g

QUESTION: How do commanders maintain security during a road march?

ANSWER: Through observation, weapons orientation, dispersion, and camouflage and assignment of 360-degree observation sectors.

Ref: 21-18, page 4-4, para 4-2

QUESTION: What can the commander do to improve unit control during reduced visibility?

ANSWER: The commander can decrease the distance to 25 meters between platoons.

Ref: FM 21-18, page 4-10

Break TIME: 00:50 to 01:00

B. ENABLING LEARNING OBJECTIVE

ACTION:	Identify the skills required to perform the duties of a convoy commander.
CONDITIONS:	As a platoon sergeant in a classroom environment.
STANDARDS:	Identified the skills required to perform the duties of a convoy commander as stated in STP 21-24-SMCT.

1. Learning Step / Activity 1. Convoy Commander Skills
Technique of Delivery: Small Group Instruction
Method of Instruction: Conference / Discussion
Instructor to Student Ratio: 1:16
Time of Instruction: 25 mins
Media: VGT-6 thru VGT-8

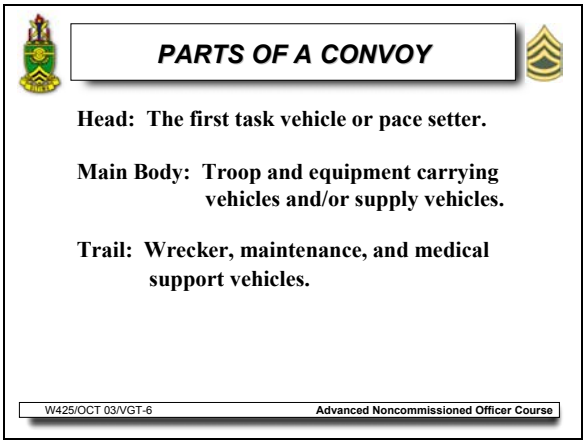
As the convoy commander you are responsible to ensure that all personnel receive a briefing on the convoy operation, that there are enough vehicles to transport the cargo, that all support personnel are aware of the convoy date and time, that you conduct a reconnaissance of the route, and that all vehicles are in the proper order for the convoy. After notification of the convoy operation, you must determine the number of vehicles required to properly transport the cargo. Once you know the number of vehicles needed, you separate them into manageable serials of twenty vehicles or less. Then divide the convoy into three parts.

QUESTION: What are the three parts of a convoy?

ANSWER: See VGT-6

Ref: STP 21-24-SMCT, page 3-303

SHOW VGT-6, PARTS OF A CONVOY



STP 21-24-SMCT, page 3-303

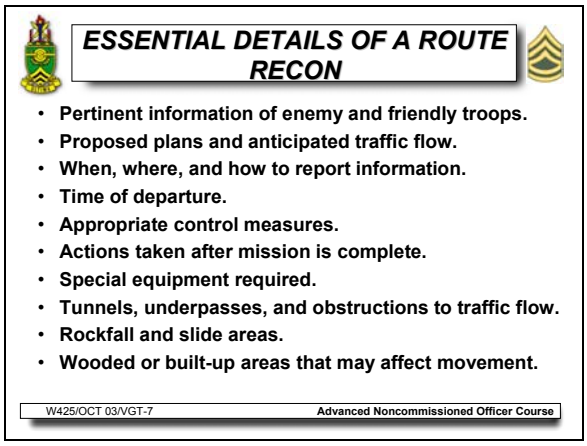
As the convoy commander you will schedule a briefing with the battalion operations officer (S3) to determine which unit will provide security, to discuss target acquisition, and to learn of any intelligence data that may impact on the convoy. You then prepare a checklist of items of which you need to brief the drivers and supervisors. You must conduct a map reconnaissance to select tentative checkpoints or confirm already established checkpoints. If time permits, you or your representative should make a ground reconnaissance to identify sites for scheduled halts and to identify any problem areas such as overhead clearance on overpasses and load classifications on bridges.

Ref: STP 21-24-SMCT, page 3-303 thru 3-307

REMOVE VGT-6

You must make the route reconnaissance instructions as detailed as possible. It must Contain the exact information you need to obtain and the time by which you need it.

SHOW VGT-7, ESSENTIAL DETAILS OF A ROUTE RECON



Ref: STP 21-24-SMCT, pages 3-219 thru 3-220

You request your convoy clearance from the battalion S3 and coordinate for any needed artillery support. You or your representative must coordinate with the escort and security element for convoy security and direct the placement of guides and signs along the convoy route to help direct the convoy. Ensure you have strip maps for all drivers. Prepare for movement by ensuring the drivers properly conduct PMCS and mark all key vehicles.

REMOVE VGT-7

QUESTION: How do you identify the lead vehicle, convoy commander's vehicle, and last vehicle?

ANSWER: Lead vehicle: With a 12 by 18 inch blue flag on the left (driver's) side.

Convoy Commander's vehicle: With a 12 by 18 inch black and white flag (divided diagonally) on the left (driver's) side.

Last vehicle: With a 12 by 18 inch green flag on the left (driver's) side.

Ref: STP 21-24-SMCT, page 3-318

You must identify all vehicles with a convoy identification number and ensure you mark them in accordance with AR 55-162. AR 55-162 goes into more detail than we have time to discuss here, however, it is a relatively simple process that you can become familiar with on your own. Next, you should establish communications throughout the convoy, and then you load equipment and inspect the vehicles and personnel. At this point you should be ready to brief the convoy personnel. Hand out strip maps that your drivers can refer to during the briefing.

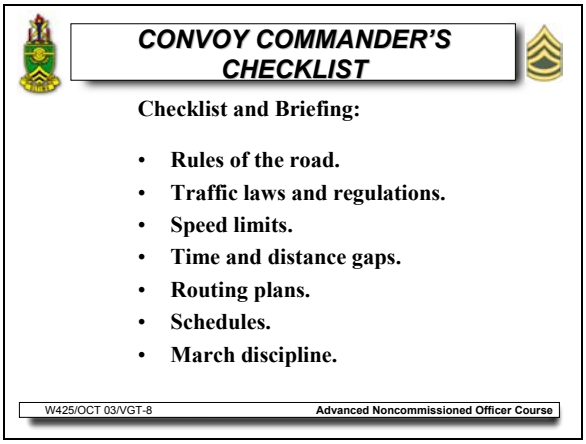
QUESTION: What items should you have on your convoy commander's checklist?

ANSWER: See VGT-8

Ref: STP 21-24-SMCT, page 3-305

Convoy Commander's Checklist

SHOW VGT-8, CONVOY COMMANDER'S CHECKLIST



Ref: STP 21-24-SMCT, page 3-305

NOTE: Discuss and clarify as necessary

REMOVE VGT-8

After you have completed the briefing, inform your personnel to mount their vehicles and start their engines. After you are sure all personnel are on their vehicles and no one is having trouble getting his engine started, give the signal to move out. Prepare to maintain organizational control by maintaining communications with your subordinate elements and making on- the-spot corrections. During halts, you should monitor activities and make on-the-spot corrections. At the release point you will need to direct the off-loading activities as required and inform your higher headquarters and fire support units of the convoy status. You should evaluate performance and identify outstanding workers, as well as those who require more training. Your last duty as the convoy commander is to prepare your report and submit a copy to your higher headquarters.

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: Why does the convoy commander schedule a briefing with the Battalion S3?

ANSWER: To determine which unit will provide security, to discuss target acquisition, and to learn of any intelligence data.

Ref: STP 21-24-SMCT, page 3-317

QUESTION: As the convoy commander, what are you responsible for?

ANSWER: You must ensure that all personnel receive a briefing on convoy operations, there are ample vehicles and personnel to transport cargo; all support elements receive information of the date and time of the convoy; all orders are brief and to the point; completion of proper reconnaissance and the correct line up of vehicles according to cargo, size, and use.

Ref: STP 21-24-SMCT, page 3-303

C. ENABLING LEARNING OBJECTIVE

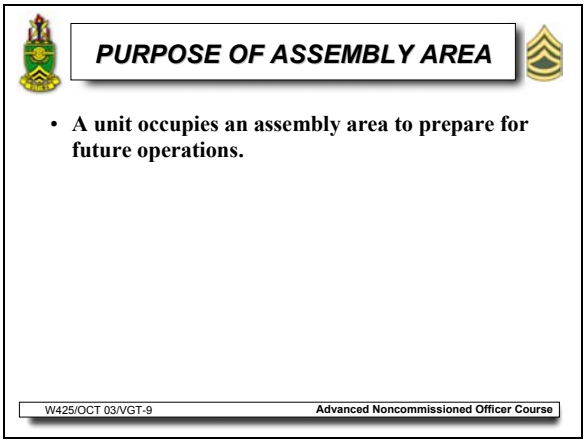
Action:	Identify the responsibilities of the platoon sergeant during occupation and management of an assembly area.
Conditions:	As a platoon sergeant in a classroom environment.
Standards:	Identified the platoon sergeant's responsibilities during occupation and management of an assembly area as stated in FM 7-7and FM 7-8.

1. Learning Step / Activity 1. Occupation and management of assembly area
   Techniques of Delivery: Small Group Instruction (SGI)
   Method of Instruction: Conference / Discussion
   Instructor to Student Ratio: 1:16
   Time of Instruction: 30 mins
   Media: VGT-9 thru VGT-11

QUESTION: What is the purpose of an assembly area?

ANSWER: See VGT-9

SHOW VGT-9, PURPOSE OF ASSEMBLY AREA



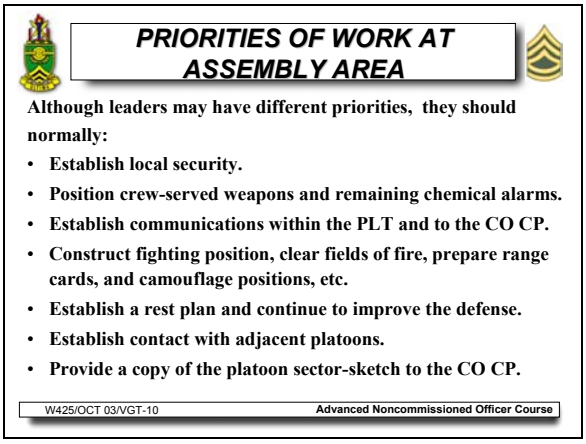
Ref: FM 7-7, page Q-6

An assembly area is a location where the company prepares for future operations. Upon notification to occupy an assembly area, the platoon leader designates a quartering party and places the platoon sergeant or another NCO in charge of it. The quartering party reconnoiters the assembly area to ensure there is no enemy activity and to establish security. Then it determines initial positions for all platoon elements. As the platoon clears the release point at the new location, the quartering party guides it into position without halting the platoon. It also provides security while the platoon is moving into position and acts as an early warning in case of enemy attack. Once in position, the platoon establishes security and the quartering party personnel report back to their squads.

REMOVE VGT-9

The assembly area must be on defendable ground and provide concealment, room for dispersion, and good internal routes, as well as provide access to routes forward. You organize a 360-degree defense by positioning your men and equipment and by "digging in“ to provide security from ground and air attack. The preparation at an assembly area depends on the unit's intended stay. Priority of work is normally a matter of SOP, but it may be part of the movement or operation order. Let’s look at some of the priorities that we should normally accomplish at the assembly area.

SHOW VGT-10, PRIORITIES OF WORK AT ASSEMBLY AREA



Ref: FM 7-8, pages 5-22 and 5-23

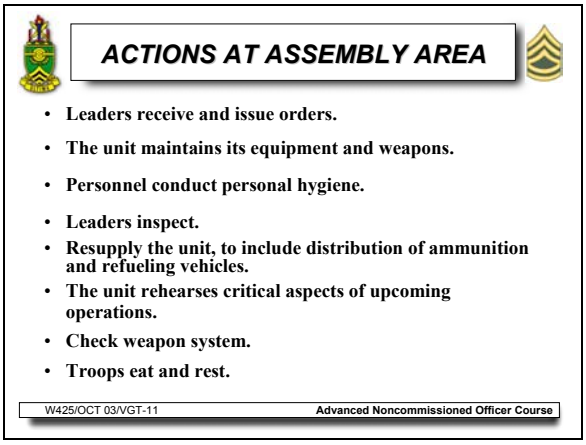
REMOVE VGT-10

QUESTION: What are some of the activities that may occur in an assembly area?

ANSWER: See VGT-11

Ref: FM 7-7, pages Q-7 and Q-8

SHOW VGT-11, ACTIONS AT ASSEMBLY AREA



While at the assembly area, the unit prepares for subsequent missions by receiving and issuing orders, servicing vehicles and equipment, receiving and issuing supplies, and feeding and resting soldiers. Note that these are just some of the activities conducted there. The priorities of work refer to the order in which you will accomplish these activities.

REMOVE VGT-11

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: Who recons the assembly area to ensure there's no enemy activity?

ANSWER: The quartering party recons the assembly area to ensure no enemy are present and to establish initial security.

Ref: FM 7-8, page 5-22

QUESTION: What must the assembly area provide?

ANSWER: It must provide concealment, defendable terrain, room for dispersion, good internal routes, and access to routes forward.

Ref: FM 7-7, page Q-6

Break 01:50 to 02:00

D. ENABLING LEARNING OBJECTIVE

Action:	Identify the steps to prepare for platoon defensive operations.
Conditions:	As a platoon sergeant in a classroom environment.
Standards:	Identified the steps to prepare for platoon defensive operations as stated in FM 7-7, FM 7-8 and STP 21-24-SMCT.

1. Learning Step / Activity 1. Defensive Operations
Technique of Delivery: Small Group Instruction (SGI)
Method of Instruction: Conference / Discussion
Instructor to Student Ratio: 1:16
Time of Instruction: 1 hr
Media: VGT-12 and VGT-13

REF: FM 7-8, page 1-0, para 1-8

During the next hour we will discuss defensive operations. Platoons and squads normally defend as part of a larger force to disrupt, disorganize, delay, or defeat an attacking enemy; deny an area to the enemy; or protect a flank. They may also defend as part of a retrograde operation. Since the enemy decides the time and location of the attack, leaders, in the defense, must seize and retain the initiative through careful planning, preparation, coordination, and rehearsal.

Leaders use the troop-leading procedures to ensure they take all necessary steps to prepare their platoon for an operation. You must analyze the factors of METT-TC to determine the best course of action. In the defense, this means determining where to best kill the enemy with fires and where to place key weapons so you can concentrate fires into that area. It means positioning remaining platoon and squad weapons to support and protect key weapons and

rehearsing your plan. You must analyze the terrain, place OPs along likely avenues of approach, and actively patrol your area to locate the enemy.

Ref: FM 7-8, page 2-26, para 2-6

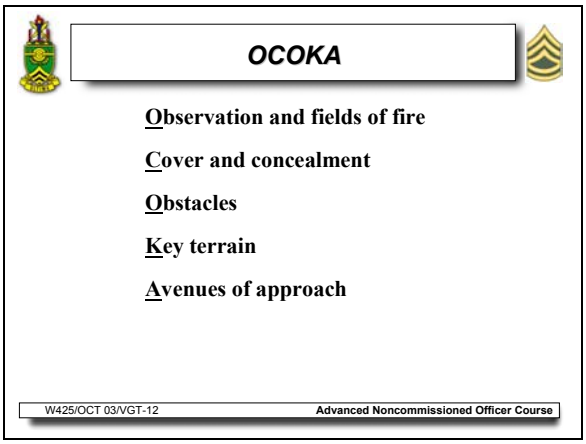
To plan a defense, leaders analyze the terrain they will defend. To do this, use the elements of the acronym OCOKA.

QUESTION: What does the acronym "OCOKA" stand for?

ANSWER: See VGT–12

Ref: 7-8, page 2-8, para 2-2c(3)

SHOW VGT-12, OCOKA



Ref: FM 7-8, page 2-8, para 2-2c(3) (a) thru (e)

REMOVE VGT-12

Security during defense

Security in the defense includes active and passive measures to avoid detection by the enemy. This includes defending terrain that will protect you from enemy observation and fires while providing you with observation and fires into the area where you intend to engage and defeat the enemy attack.

When necessary, you can use defensive techniques such as reverse slope or perimeter defense to improve the security of your position. You need to consider adjacent key terrain that might threaten the security of your position should the enemy occupy it. You can secure this terrain by posting OPs and by covering it with direct and indirect fire.

Placing weapons

Ultimately, the success of your defense depends on the placement of your soldiers and your crew-served weapons. To properly position your weapons, you must take into consideration the capabilities and limitations of the weapon, the effects the terrain will have on the weapon, and the tactics of the enemy. You should place your weapons where you can protect them from enemy observation and fires. You position all other weapons to support your key weapons, cover dead space, and provide security.

Ref: FM 7-8, page 2-72, para 2-18

Range cards

Once weapons are in place, all direct-fire weapon gunners must immediately prepare a range card. Range cards are records of firing data required to engage predetermined targets within the sector of fire of the weapon. Prepare a range card for primary, alternate, and supplementary fighting positions. You will prepare two copies of the range card and send one copy to the platoon headquarters while the second copy stays at the position.

Distance between positions

A squad can normally occupy a front of about 100 meters and defend 200 to 250 meters of frontage. The frontage distance between two-man fighting positions should be about 20 meters. One-man positions should be closer together with the squad defending the same frontage. The distance between positions depends on the leader's analysis of METT-TC.

Ref: FM 7-8, page 2-76, para 2-21

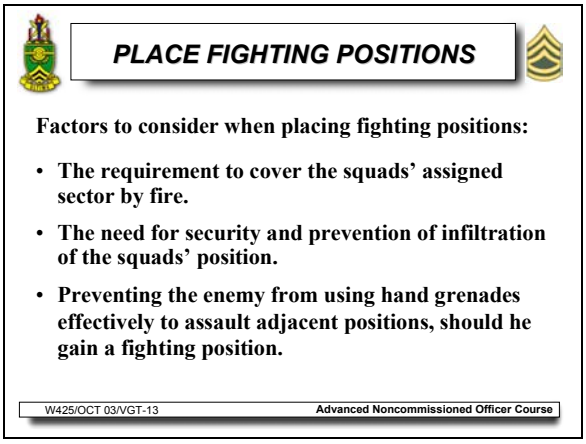
QUESTION: What factors must you consider when determining the distance between fighting positions?

ANSWER: See VGT-13

Ref: FM 7-8, page 2-80, para 2-21

NOTE: Select students to explain each of the factors listed on the VGT. Discuss and clarify as necessary.

SHOW VGT-13, PLACING FIGHTING POSITIONS



REMOVE VGT-13

Fighting positions

Every position should have observation and fire support from at least two other positions.

Ref: FM 7-8, page 2-80, para 2-22

The platoon leader/sergeant assigns primary positions and sectors of fire for machine guns and anti-armor weapons, and he assigns primary positions and sectors of fire for his squads. Each squad sector must cover its own front, as well as overlap the sector of the adjacent squad. Flank squads should overlap the sector of adjacent squads.

Ref: FM 7-8, page 2-85

Coordinating with adjacent platoons

In defense, it's the platoon leader/sergeant's responsibility to coordinate with adjacent platoons to ensure there are no gaps in the defense and that the platoon can cover all areas by fire. They must ensure that adjacent platoons know where they located their positions, to include OPs. They must ensure they covered all dead space and that all fires are interlocking and mutually supporting. They must keep each other informed of any patrol activity and the location and types of obstacles used in the defense.

Ref: STP 21-24-SMCT, page 3-264

Sector sketch

Squad leaders then prepare sector sketches based on the defensive plan using the range cards of all crew-served weapons. The platoon sergeant then checks the range cards and squad

sector sketches and makes adjustments to the defense as needed. They will then make a platoon sector sketch based on the squad sketches and send a copy to the company CP.

Ref: FM 7-8, pages 2-80 thru 2-82, para 2-23

NOTE: Refer students to FM 7-8, page 2-82, para 2-23 and page 2-83, fig 2-43 for information that a sector sketch should contain.

After conducting defensive operations, platoons and squads must be able to reorganize quickly so they can continue the defense against follow-on forces.

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: What must you consider when positioning your weapons?

ANSWER: You must consider the capabilities and limitations of the weapon, the effects the terrain will have on the weapon, and the tactics of the enemy.

Ref: FM 7-8, page 2-72, para 2-18

QUESTION: What is the purpose of the range card?

ANSWER: Range cards are records of firing data required to engage predetermined targets within the sector of fire of the weapon.

Ref: FM 7-8, page 2-76, para 2-19

Break 02:50 to 03:00

E. ENABLING LEARNING OBJECTIVE

Action:	Identify the tasks required during consolidation and reorganization while in the defense.
Conditions:	As a platoon sergeant in a classroom environment.
Standards:	Identified the tasks required during consolidation and reorganization while in the defense as stated in FM 7-8 and STP 21-24-SMCT.

1. Learning Step / Activity 1. Consolidation and Reorganization in Defense
   Technique of Delivery: Small Group Instruction (SGI)
   Method of Instruction: Conference / Discussion
   Instructor to Student Ratio: 1:16
   Time of Instruction: 20 mins
   Media: VGT-14

When you repel an enemy assault or move the platoon to a new defensive position, you must prepare your soldiers to counter attack or defend in place. If your commander directs the platoon to hold its present position, you must prepare for further enemy action. The platoon must consolidate and reorganize.

Consolidation

The consolidation plan should be as simple as possible. Squad positions are set closer to ease control and to improve mutual support. Adjust positions should as visibility improves. Locating and evacuating casualties and EPWs takes longer. The platoon uses either the clock technique or the terrain feature technique in consolidating its forces:

1. Clock technique. In using this method, the platoon leader designates either a compass direction or the direction of attack as 12 o'clock. He then uses clock positions to identify the left and right boundaries for squads. The platoon leader then positions his key weapons along the most likely avenue of approach based on his assessment of the terrain.

2. Terrain feature technique. In a similar manner, the platoon leader identifies obvious terrain features as the left and right limits for squads.

In both techniques, he ensures that squad sectors of fire overlap each other and provide mutual support for adjacent units.

Ref: 7-8, page 2-58

Reorganization

Once the platoon has consolidated, it begins its reorganization. Platoons reorganize to continue their attack or prepare for subsequent enemy attacks.

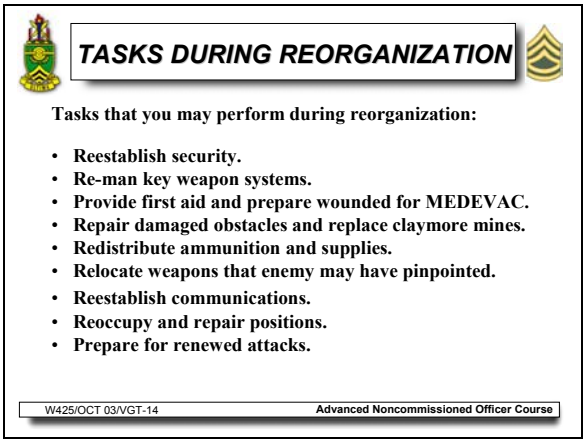
QUESTION: What tasks do you perform during reorganization?

ANSWER: See VGT–14

Ref: 7-8, page 2-70

NOTE: Call on students to elaborate on each bullet on the VGT.

SHOW VGT-14, TASKS DURING REORGANIZATION



Ref: FM 7-8, page 2-70, para g

REMOVE VGT-14

Squad leaders should inventory and redistribute remaining ammunition and provide ammunition, casualty, and equipment (ACE) reports to the platoon leader. The platoon leader reestablishes the platoon chain of command and provides a copy of the platoon ACE report to the company commander. The platoon sergeant coordinates for resupply and supervises the evacuation of casualties and enemy prisoners of war (EPW). The platoon reestablishes OPs and continues to improve its positions.

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: What is the first task you must accomplish while consolidating the platoon?

ANSWER: You must reestablish security.

Ref: FM 7-7, page 8-16, para 8-19

QUESTION: What are the major tasks in reorganization?

ANSWER: The major tasks are:

1. Reestablish the chain of command
2. Evacuate the dead and wounded
3. Redistribute or resupply ammunition and weapons
4. Ensure manning of all crew-served weapons.
5. Collect and evacuate EPWs
6. Send SITREP to higher headquarters

Ref: STP 21-24-SMCT, page 3-166

F. ENABLING LEARNING OBJECTIVE

Action:	Identify the steps required to properly handle enemy personnel and equipment at the unit level.
Conditions:	As a platoon sergeant in a classroom environment.
Standards:	Identified the steps required to properly handle enemy personnel and equipment at unit level as stated in FM 7-7, FM 7-8, and STP 21-24-SMCT.

1. Learning Step / Activity 1. Handling EPW
Technique of Delivery: Small Group Instruction (SGI)
Method of Instruction: Conference / Discussion
Instructor to Student Ratio: 1:16
Time of Instruction: 30 mins
Media: VGT-15

Enemy prisoners of war (EPW) are a good source of intelligence information. It is your responsibility to ensure your soldiers handle them in accordance with international law. If you do not treat them humanely, you risk the chance of gaining information from them.

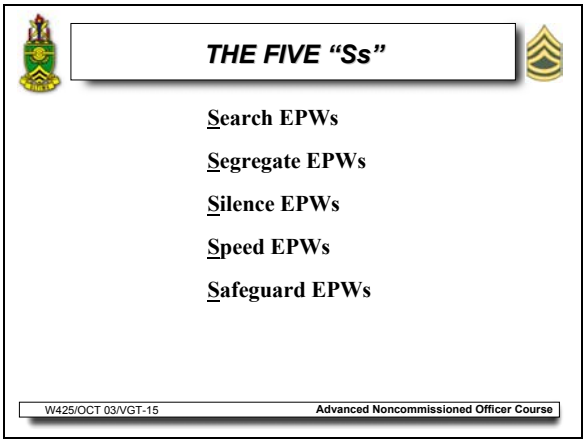
If you cannot evacuate the EPWs in a reasonable time, give them food, water, and first aid. Do not give them any comfort items such as cigarettes or candy. Mistreated EPWs or those who receive favors are poor interrogation subjects. In handling EPWs you should follow the Five Ss.

QUESTION: What are the Five "Ss" and what do they stand for?

ANSWER: See VGT-15

NOTE: Call on students to elaborate on each bullet on the VGT. Ensure that the student responses cover the following key points.

SHOW VGT-15, THE FIVE „S's"



Ref: STP 21-24 SMCT, page 3-241

Search

As soon as you capture the enemy you must search him and seize his weapons and any papers (for example, maps, overlays, or operations orders) and equipment of new or unusual design he may have. You do not, however, take his identification papers and protective mask. Give him a written receipt for any personal property or documents taken. Be sure to tag documents and property to show which EPW had them.

When searching an EPW, one man must guard while another searches the prisoner. The soldier searching must not get between the prisoner and the guard. Have the prisoner spread-eagle against a tree or wall or in the pushup position with his knees on the ground. Be sure you search him, all his equipment, and his clothing.

Segregate

Segregate the prisoners into groups according to sex and into subgroups such as enlisted personnel, officers, civilians, and political figures. This will help prevent the leaders from organizing an escape effort. Keep the groups segregated as you move them to the rear.

Silence

Do not let the prisoners talk to each other. This prevents them from planning an escape. Report anything they say or do.

Speed

Speed evacuation of your EPWs to the rear. Turn them over to your leader and he will assemble them and move them to the rear for questioning.

Safeguard

When taking your prisoners to the rear, do not let anybody abuse them. You must protect them from mistreatment, humiliation, degrading acts and injury. You should try to evacuate wounded or injured prisoners through normal channels. If that is not possible, evacuate them through medical channels.

REMOVE VGT-15

The next concern is to properly handle EPW material. As an NCO, you may discover captured enemy documents (CED) or captured enemy equipment (CEE). Proper and efficient

handling of this material may provide vital information which your unit and other friendly units must have to accomplish the mission. CED or CEE may provide technical intelligence information of immediate value for targeting purposes, order of battle intelligence, or to aid in the determination of enemy capabilities and vulnerabilities. The efficient exploitation of captured documents has served lives in the past and will surely save lives, perhaps your own, in the future. The term captured enemy material (CEM) encompasses both captured enemy documents (CED) and captured enemy equipment (CEE).

Ensure that you properly tag the prisoner and his equipment prior to removing him from the battlefield. Enemy documents and equipment are good sources of intelligence information. Be sure to handle such items properly so you don't lose the potential intelligence information in them or so the information does not become outdated. Document each item using DD Form 2745. If you found the item on an EPW, put the prisoner's name on the form.

NOTE: Refer students to STP 21-24-SMCT, page 3-242 for an example of a DD Form 2745.

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: What are the five Ss in handling EPWs?

ANSWER: The five Ss are:

1. Search
2. Segregate
3. Silence
4. Speed
5. Safeguard

QUESTION: What items do you return to EPW?

ANSWER: You must return his identification card along with his personal documents and protective equipment.

Ref: STP 21-24-SMCT, pages 3-241 thru 3-243

Break 03:50 to 04:00

G. ENABLING LEARNING OBJECTIVE

Action:	Identify the effects of continuous operations on personnel.
Conditions:	As a platoon sergeant in a classroom environment.
Standards:	Identified the effects of continuous operations on personnel as stated in FM 6-22.5.

1. Learning Step / Activity 1. Continuous Operations
Technique of Delivery: Small Group Instruction (SGI)
Method of Instruction: Conference / Discussion
Instructor to Student Ratio: 1:16
Time of Instruction: 40 mins
Media: VGT-16 thru VGT-18

Continuous Operations

Continuous operations (CONOPS) is combat continuing at the same high intensity level for extended periods. Soldiers may have opportunities for sleep, but this sleep may be brief or fragmented. Continuous land combat is an advanced warfare concept made possible by the almost complete mechanization of land forces and technology that permits effective movement at night, during poor weather, and in other low-visibility conditions. Armies now have the potential to fight without let up and night operations have become more common. Under such conditions, the soldiers' performance will undoubtedly suffer. This continuous cycle of day and night operations may cause degradation of performance in cognitive skills beginning as early as 18 to 24 hours into CONOPs. Short notice deployments are becoming routine as our force changes from CONUS-based to forward deployed force.

Combat support and combat service support units are as likely to deploy to trouble spots as are combat units, as seen during operations Desert Shield/Storm and Operation Restore Hope. The stress process begins during the deployment stage as soldiers and leaders alike begin to experience fatigue and performance degradation.

Sleep debt

QUESTION: What is "sleep debt"?

ANSWER: A cumulative loss of sleep over time.

Ref: FM 6-22.5, chapter 4

During continuous operations a soldier may only receive limited or fragmented sleep, thus causing a sleep debt. The only corrective measure for satisfying a sleep debt is sleep itself. The

soldiers' ability to function is the key to winning battles. Without the soldier, weapons and tactics are useless.

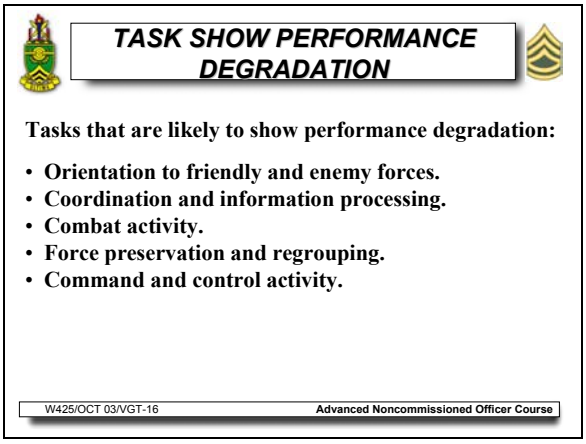
Continuous operations will degrade performance and erode mental abilities faster than it will erode physical strength and endurance. Leaders must implement an effective sleep plan. Activities most dependent on reasoning, thinking, problem solving, and decision making suffer the most when soldiers neglect sleep.

Ref: FM 6-22.5, page 60

Performance degradation

NOTE: Call on different students to explain and give an example for each of the tasks listed on the VGT.

SHOW VGT-16, TASKS SHOW PERFORMANCE DEGRADATION



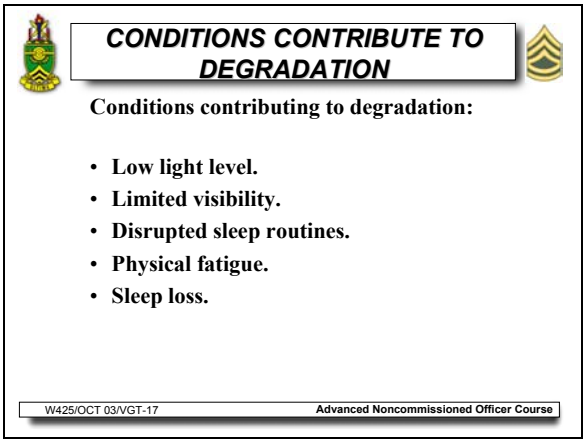
Ref: FM 6-22.5, pages 57 and 58

REMOVE VGT-16

During continuous operations, soldiers perform under adverse conditions that cause performance degradation. These adverse conditions include:

NOTE: Call on different students to explain each of the conditions on the VGT. Use the following discussion, as necessary, to clarify student responses.

SHOW VGT-17, CONDITIONS CONTRIBUTE TO DEGRADATION



Ref: FM 6-22.5, page 62 and 63

Low light level. Affects seeing landmarks, targets, and maps at twilight and at night.

Limited Visibility. Smoke, fog, rain, snow, ice, and glare make seeing difficult.

Disrupted sleep routines. Every person is normally asleep during certain hours of the day or night. Disruption of the normal sleeping schedule causes performance to degrade.

Physical fatigue. Working the muscles faster and harder than the body can supply them with oxygen and fuel creates a "debt" which may eventually make them unable to function until you make up the deficits by resting them.

Sleep loss. Your muscles can function adequately without sleep, however, your brain cannot. Sleep debt can lead to subtle but potentially critical performance failures.

REMOVE VGT-17

REF: FM 6-22.5, page 66

Sleep management is a combat multiplier. Leaders must plan sleep routines to help the unit and individual soldiers perform satisfactorily during continuous operations. Leaders must understand that we base individual performance on a 24 hour, day-night/work-rest cycle. When we move soldiers across numerous time zones we disrupt the usual relationship of this cycle. You can expect soldiers not to be sleepy during the normal period of 2400 to 0600 new-locale time for a few days. For example, a move across numerous time zones causes them to be sleepiest at 1200 to 1800 new-locale time.

Ref: 6-22.5, page 67

Letting them sleep when they are sleepiest will only cause them to take longer to adapt to their new time zone. Leaders must make their soldiers sleep between 2400 and 0600 new-locale time. The impact of sleep debt on a soldier's performance is most obvious between the hours of 0200 to 0600. Performance normally declines about 10 to 15 percent during this time. In sleep deprived soldiers, however, the decline may be as high as 35 to 40 percent. If you disrupt the day-night/work-rest cycle, performance will suffer. The soldier will need several days to adjust to the new schedule.

Soldiers become increasingly tired, leaders must recognize the problem areas and take Appropriate action.

QUESTION: How can you as the leader measure sleep loss within your platoon?

NOTE: Call on several students to answer questions before giving the answer.

ANSWER: Keeping a sleep and/or activity log and observing performance and asking questions.

Ref: FM 6-22.5, page 70

You will start your platoon's sleep or activity log from pre-deployment to post-deployment by logging each of your soldier's sleep and nap periods. Each soldier needs four to five hours per 24-hour period with an optimum of six to seven hours per 24-hour period. When your log indicates your soldier has received less than four to seven hours in a 24-hour period, its your responsibility to ensure they get sleep at the first long rest period.

QUESTION: What are the indications of sleep loss?

NOTE: Call on several students to answer the question before giving the answer.

ANSWER: Increase in error occurrence, irritability, difficulty understanding information, attention lapses, decreases in initiative, short-term memory, and attention to personal hygiene.

Ref: FM 6-22.5, page 70

You can confirm your log results by asking your soldiers the obvious question: "When did you sleep last and how long did you sleep?" Once you have that information, you must begin to think of ways to provide your soldiers with an opportunity for sleep or implement a sleep plan.

Sleep loss alternatives

There are many ways to overcome your platoon's performance due to sleep loss degradation.

They are as follows:

- Upon signs of diminished performance, find time for members to nap, change routines or rotate jobs (if cross-trained).
- Use soldiers mostly affected by sleep loss to execute a self-paced task.
- Have soldiers execute a task as a team, using the buddy system.
- Never awaken soldiers for a meal while in flight to a new location, especially if the time zone of the destination is several hours different than that of the point of departure.
- Insist soldiers urinate before going to bed. Not doing this interrupts the sleep cycle getting in and out of bed and may disturb others.
- Allocate sleep by priority.

As a leader you need the highest priority and largest allocation of sleep because the mission Success and the platoon survival depends on you. The second priority goes to the following soldiers:

- Performing guard duty.
- Performing calculations.
- Making judgments.
- Sustaining attention.
- Evaluating information.
- Performing a degree of precision and alertness.

Your knowledge of sleep loss alternatives may mean the success or failure of your mission.

Sleep/rest planning

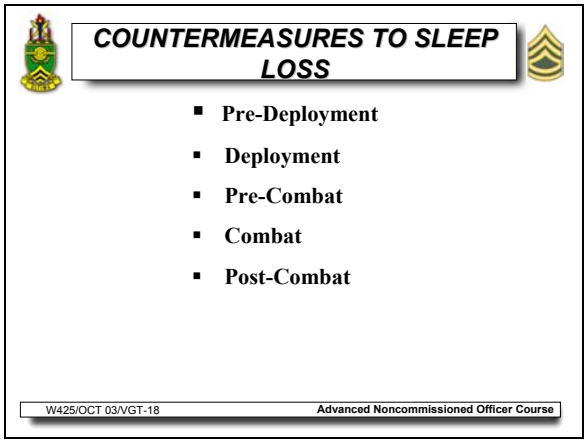
We discussed methods how to measure sleep loss and ways to overcome performance degradation, now it is time to discuss how to use sleep/rest planning in your platoon.

QUESTION: What are the five stages for sleep/rest planning?

NOTE: Call on several students to answer the question before showing the VGT.

ANSWER: See VGT-18

SHOW VGT-18, COUNTERMEASURES TO SLEEP LOSS



Ref: FM 6-22.5, pages 71 thru 73

You will apply sleep/rest planning to each stage of battle. Let's look at each stage individually as how they may apply to you and your soldiers.

The Pre-deployment Stage involves the uses of mission-scenario operation guidelines to determine periods available for sleep and the total number of sleep hours possible. During continuous operations a requirement may change and you may have to alternate sleep routines. During this stage practice the same sleep routines you anticipate using in combat.

The Deployment Stage will cause a reduction in you and your soldiers sleep routines. Your commander may implement one of three work plans (4-hour on/4-hour off, 6-hour on/6-hour off, or 12-hour on/12-hour off) during this stage. You will have the responsibility of ensuring you and your soldiers sleep during the off period. Provide your soldiers on night duty with sleeping quarters to avoid the disruption of their sleep period.

The Pre-combat Stage, in general, people are most effective during the afternoon and least effective just before dawn. Without prior adjustment to the new time zone, which naturally occurs in 3 to 5 days, leaders can expect degraded daytime performance. The reason you will see a degraded daytime performance is that 0200 to 0600 hours home-base time is the low point in performance efficiency. This requires you to plan your soldiers workloads wisely.

The Combat Stage requires your total involvement in planning your soldiers sleep plan to ensure each soldier receives their proper amount of sleep. Sleep loss will be a part of intense combat,

so you and your soldiers must try to take advantage of every minute of limited sleep. Uninterrupted short period of sleep of 15 minutes or longer are beneficial to partially recovering alertness. These short periods of sleep will affect each soldier differently, so watch them as they awaken to understand how sleep affects them individually. Remember it may take the brain from several seconds to 15 minutes to "warm up" before your soldiers can function normally. Also, things like moderate exercise or drinking of a hot beverage may shorten the brain start-up time.

The Post Combat Stage is difficult to define a standard for all soldiers because none of the experts in this area agree with each other. So it is your responsibility to observe your soldiers and find a standard that will work for you and your soldiers. Use the suggestions in FM 6-22.5, pages 73 thru 75 and your experiences to create standards for your platoon.

REMOVE VGT-18

CHECK ON LEARNING: Conduct a check on learning and summarize the ELO.

QUESTION: After the unit crosses several time zones, what is the best performance slump/optimal time for soldiers to sleep?

ANSWER: Soldiers should sleep between 2400 and 0600 new-local time.

Ref: FM 6-22.5, page 68

QUESTION: What are the critical hours for sleep?

ANSWER: The critical hours for sleep are between 0200 and 0600 because the body is at its lowest temperature during this period.

Ref: FM 6-22.5, page 67

QUESTION: The highest priority and largest allocation of sleep goes to whom?

ANSWER: Leaders, on whose decisions mission success and unit survival depends upon.

Ref: FM 6-22.5, page 71

SECTION IV. SUMMARY

Method of Instruction: Conference / Discussion
Technique of Delivery: Small Group Instruction (SGI)
Instructor to Student Ratio is: 1:16
Time of Instruction: 5 mins
Media: None

Check on Learning

QUESTION: What are troop leading procedures and how do they apply to platoon tactical operations?

ANSWER: Troop leading procedures make up the process a leader goes through to prepare his unit to accomplish combat missions or tactical operations.

Ref: FM 7-8, p 2-3, para 2-2

QUESTION: What question would you ask your soldiers to confirm sleep loss?

ANSWER: "When did you sleep last and how long did you sleep?"

Ref: FM 6-22.5, p 70

QUESTION: What is sleep debt?

ANSWER: The cumulative loss of sleep over time.

Ref: FM 6-22.5, p 57

Transition to Next Lesson

None

Review / Summarize Lesson

During the last five hours we discussed supervising a platoon tactical road march, the duties of a convoy commander, occupying an assembly area, platoon defensive operations, consolidation and reorganization, handling of enemy personnel and equipment, and continuous operations on personnel.

As you can see, the duties and responsibilities of a platoon sergeant are numerous. Not only must he know his own responsibilities, but those of his squad leaders and platoon leader. The success or failure of the unit, as well as the lives of your soldiers, depends on how well you function under adverse conditions.

SECTION V. STUDENT EVALUATION

Testing Requirements	**NOTE:** Describe how the student must demonstrate accomplishment of the TLO. Refer student to the Student Evaluation Plan. • Written Examination: You will receive an end of course written examination that will include some learning objectives from this lesson. You must answer 70 percent of the questions to receive a GO. A GO is a graduation requirement. • Performance Examination: The cadre will evaluate your ability to supervise these tasks during the phase II FTX/STX. They will provide you with feedback during counseling sessions and/or an after action review.
Feedback Requirements	None

Enabling Learning Objective A

VGT-1, PLATOON TACTICAL OPERATIONS

PLATOON TACTICAL OPERATIONS

W425/OCT 03/VGT-1 **Advanced Noncommissioned Officer Course**

TERMINAL LEARNING OBJECTIVE

Action: **Supervise platoon tactical operations.**

Conditions: **In a field environment, given FM 6-22.5, FM 7-7, FM 7-8, FM 21-18, and STP 21-24-SMCT.**

Standards: **Implemented platoon tactical operations IAW 6-22.5, FM 7-7, FM 7-8, FM 21-18, and STP 21-24-SMCT.**

- Conducted tactical road march.
- Performed duties of a convoy commander.
- Managed and occupied an assembly area.
- Prepared platoon defensive operations.
- Consolidated and reorganized while in the defense.
- Supervised the handling of enemy prisoners and equipment.

TROOP LEADING PROCEDURES

1. Receive the mission.
2. Issue a warning order.
3. Make a tentative plan.
4. Start necessary movement.
5. Conduct reconnaissance.
6. Complete the plan.
7. Issue the complete.
8. Supervise.

ELEMENTS OF A ROAD MARCH

- The reconnaissance party.
- The quartering party.
- The main body.
- The trail party.

INFORMATION FOR PASSING UNITS

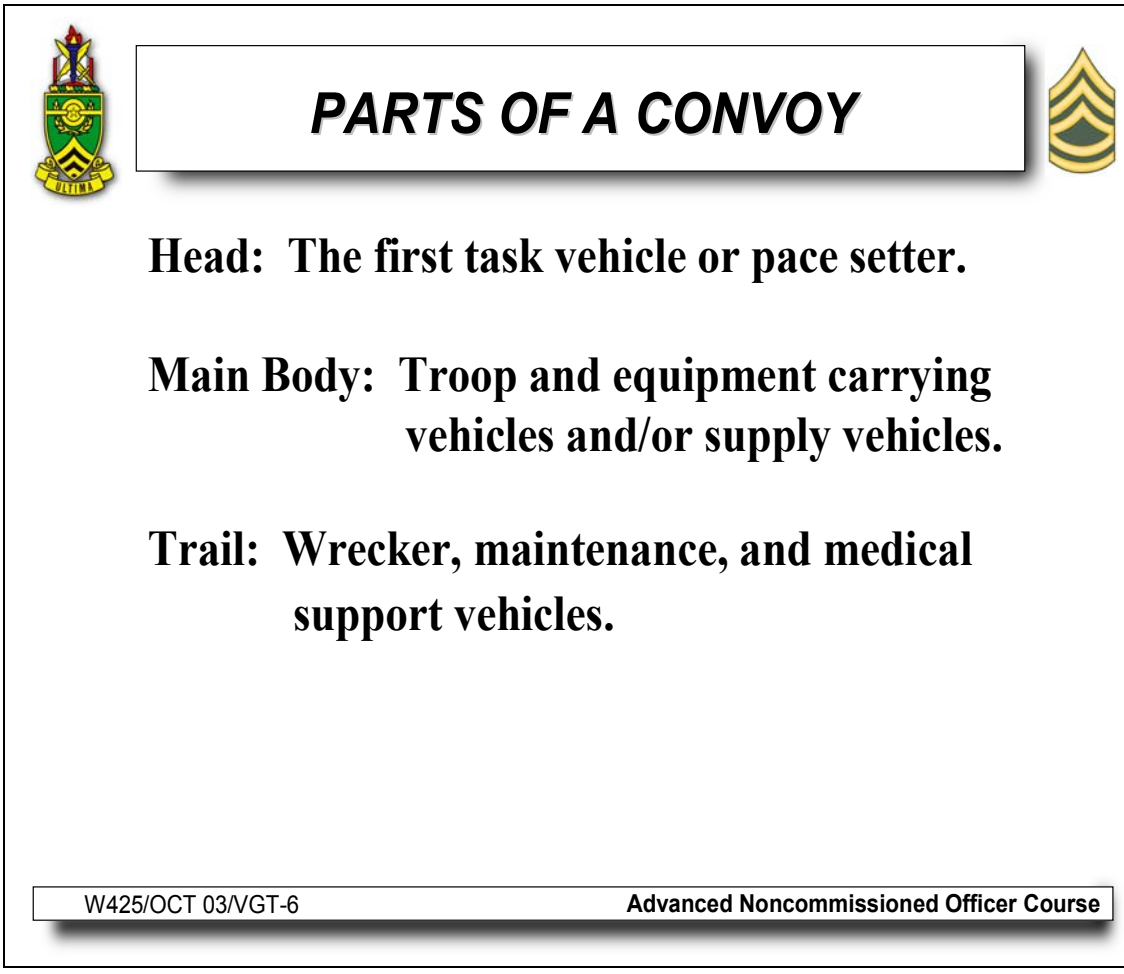
Information that messengers/road guides can give to passing units:

- **A strip map.**
- **The number, sequence, identification, and composition of march units.**
- **Expected arrival and clearance times for march units passing the guide's position.**
- **Recognition signals.**
- **How to position guides, who will pick them up, and when.**
- **Instructions for linking up with the parent unit upon completion of road guides duties.**
- **Special instructions for the road guides to pass on to the march unit commander, to include details of the route and any changes.**

Enabling Learning Objective B

Learning Step 1

VGT-6, PARTS OF A CONVOY



ESSENTIAL DETAILS OF A ROUTE RECON

- Pertinent information of enemy and friendly troops.
- Proposed plans and anticipated traffic flow.
- When, where, and how to report information.
- Time of departure.
- Appropriate control measures.
- Actions taken after mission is complete.
- Special equipment required.
- Tunnels, underpasses, and obstructions to traffic flow.
- Rockfall and slide areas.
- Wooded or built-up areas that may affect movement.

CONVOY COMMANDER'S CHECKLIST

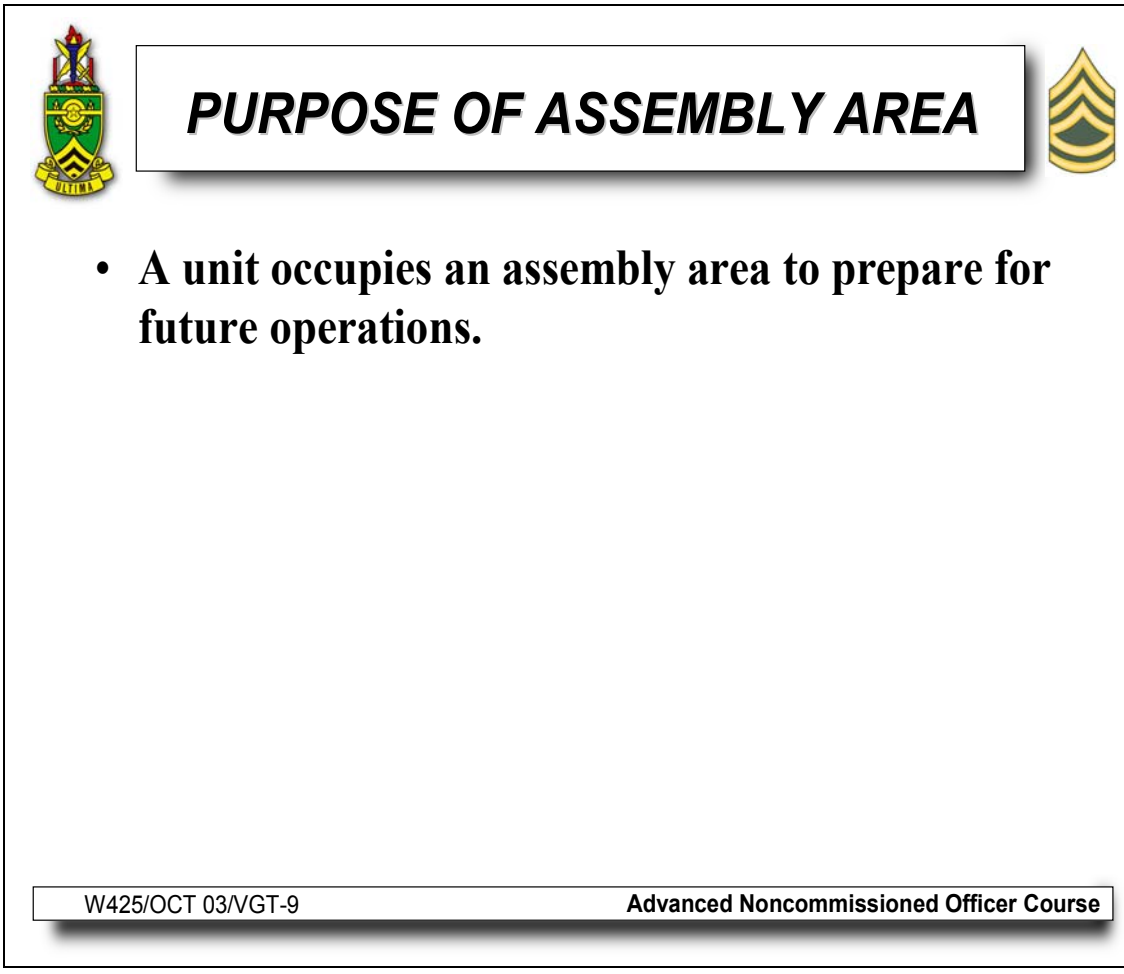
Checklist and Briefing:

- **Rules of the road.**
- **Traffic laws and regulations.**
- **Speed limits.**
- **Time and distance gaps.**
- **Routing plans.**
- **Schedules.**
- **March discipline.**

Enabling Learning Objective C

Learning Step 1

VGT-9, PURPOSE OF AN ASSEMBLY AREA



PRIORITIES OF WORK AT ASSEMBLY AREA

Although leaders may have different priorities, they should normally:

- **Establish local security.**
- **Position crew-served weapons and remaining chemical alarms.**
- **Establish communications within the PLT and to the CO CP.**
- **Construct fighting position, clear fields of fire, prepare range cards, and camouflage positions, etc.**
- **Establish a rest plan and continue to improve the defense.**
- **Establish contact with adjacent platoons.**
- **Provide a copy of the platoon sector-sketch to the CO CP.**

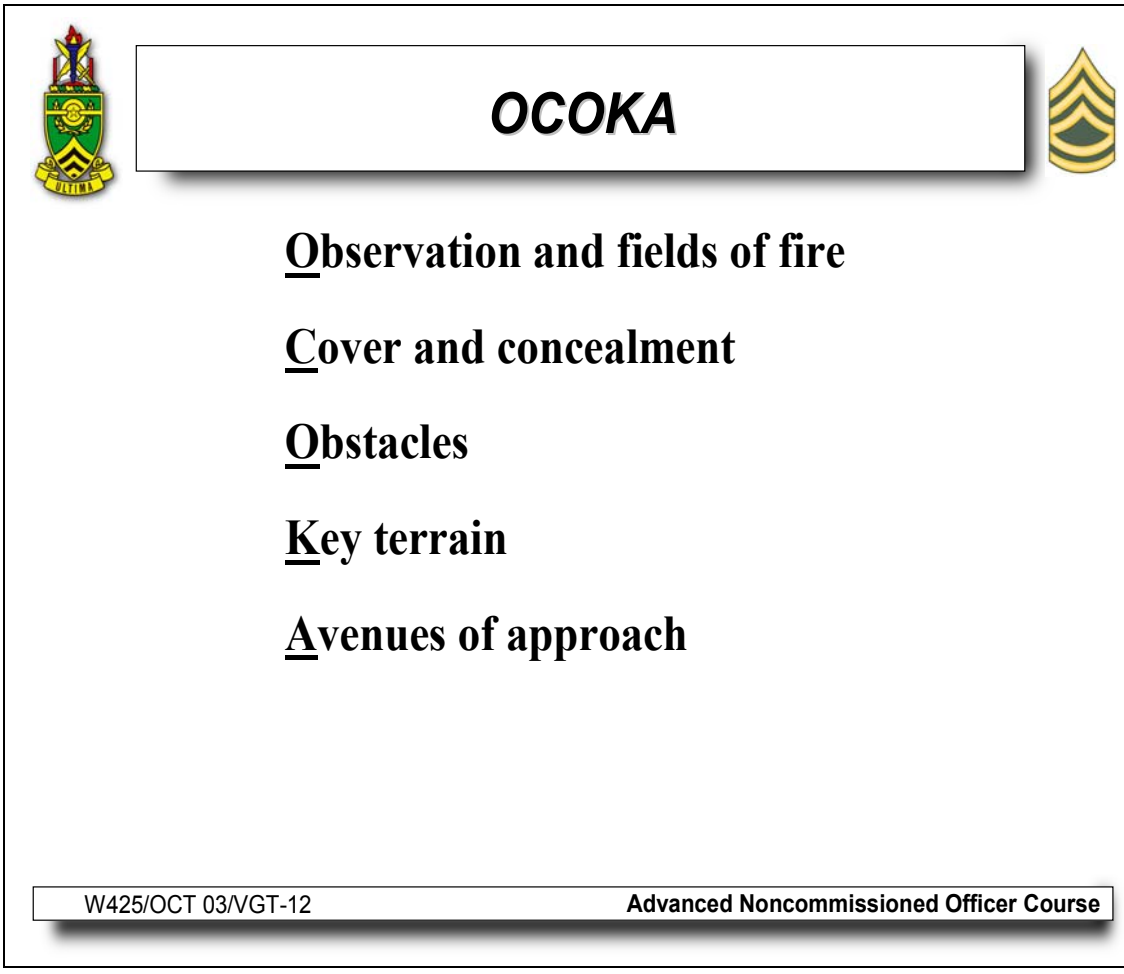
ACTIONS AT ASSEMBLY AREA

- **Leaders receive and issue orders.**
- **The unit maintains its equipment and weapons.**
- **Personnel conduct personal hygiene.**
- **Leaders inspect.**
- **Resupply the unit, to include distribution of ammunition and refueling vehicles.**
- **The unit rehearses critical aspects of upcoming operations.**
- **Check weapon system.**
- **Troops eat and rest.**

Enabling Learning Objective D

Learning Step 1

VGT-12, OCOKA



PLACE FIGHTING POSITIONS

Factors to consider when placing fighting positions:

- **The requirement to cover the squads' assigned sector by fire.**
- **The need for security and prevention of infiltration of the squads' position.**
- **Preventing the enemy from using hand grenades effectively to assault adjacent positions, should he gain a fighting position.**

Enabling Learning Objective E

Learning Step 1

VGT-14, TASKS DURING REORGANIZATION

TASKS DURING REORGANIZATION

Tasks that you may perform during reorganization:

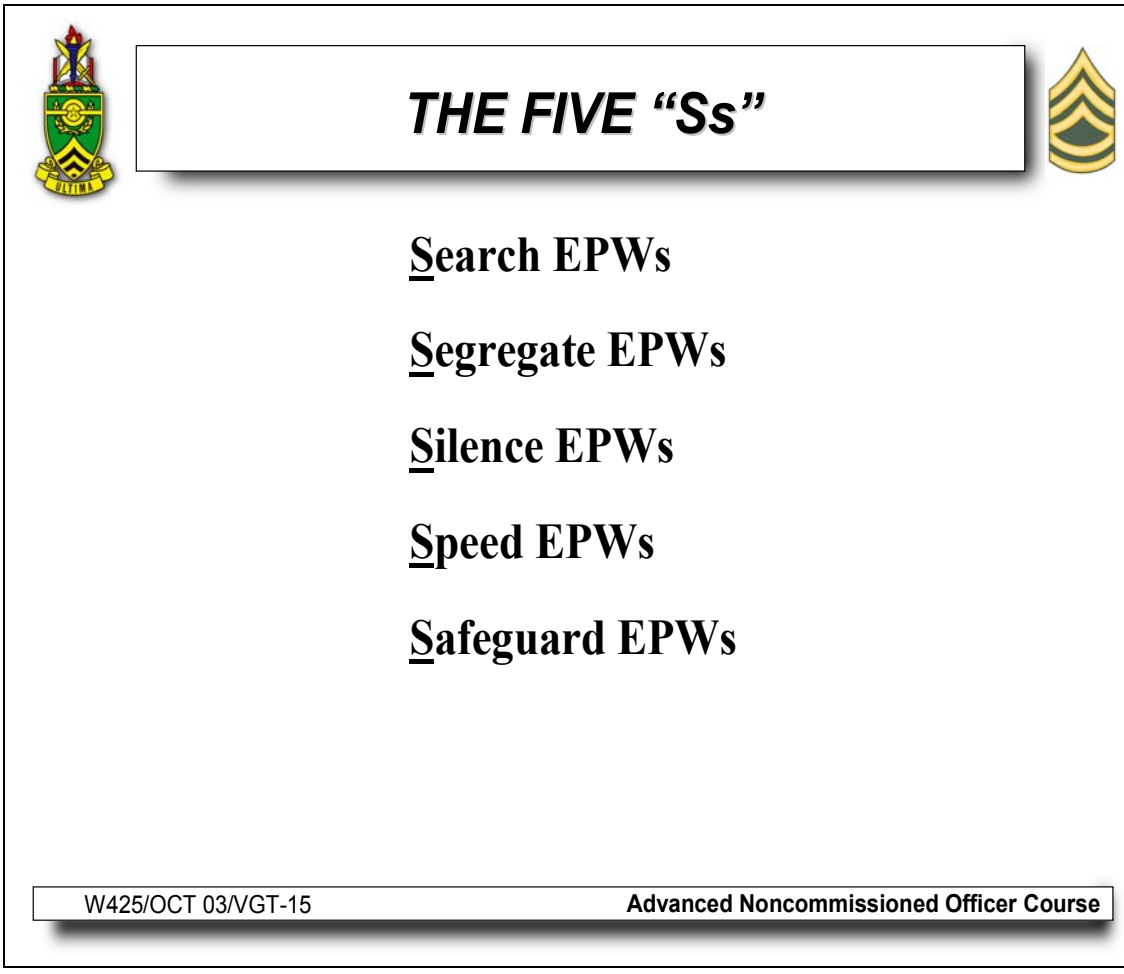
- **Reestablish security.**
- **Re-man key weapon systems.**
- **Provide first aid and prepare wounded for MEDEVAC.**
- **Repair damaged obstacles and replace claymore mines.**
- **Redistribute ammunition and supplies.**
- **Relocate weapons that enemy may have pinpointed.**
- **Reestablish communications.**
- **Reoccupy and repair positions.**
- **Prepare for renewed attacks.**

W425/OCT 03/VGT-14 **Advanced Noncommissioned Officer Course**

Enabling Learning Objective F

Learning Step 1

VGT-15, THE FIVE Ss



Enabling Learning Objective G

Learning Step 1

VGT-16, TASKS SHOW PERFORMANCE DEGRADATION

TASK SHOW PERFORMANCE DEGRADATION

Tasks that are likely to show performance degradation:

- **Orientation to friendly and enemy forces.**
- **Coordination and information processing.**
- **Combat activity.**
- **Force preservation and regrouping.**
- **Command and control activity.**

W425/OCT 03/VGT-16 **Advanced Noncommissioned Officer Course**

CONDITIONS CONTRIBUTE TO DEGRADATION

Conditions contributing to degradation:

- **Low light level.**
- **Limited visibility.**
- **Disrupted sleep routines.**
- **Physical fatigue.**
- **Sleep loss.**

COUNTERMEASURES TO SLEEP LOSS

- Pre-Deployment
- Deployment
- Pre-Combat
- Combat
- Post-Combat

Appendix B Test(s) and Test Solution(s) (N/A)

Appendix C Practical Exercises and Solutions (N/A)

HANDOUT FOR LESSON 1: W425 version 1

This Appendix Contains

This appendix contains the items listed in this table--

Student Handout 1

This student handout contains Advance Sheet.

STUDENT HANDOUT 1

Advance Sheet

Lesson Hours This lesson consists of five hours of small group instruction.

Overview In this lesson we will build upon the instruction you received concerning troop leading procedures. Leaders use the troop leading procedures to make sure they take all necessary steps to prepare for an operation. In this lesson you will use the troop leading procedures to identify the skills and knowledge required of a platoon sergeant during platoon tactical operations. This lesson consists of a reading assignment and a classroom discussion.

Learning Objective Terminal Learning Objective (TLO)

Action:	Supervise platoon tactical operations.
Conditions:	In a field environment, given FM 6-22.5, FM 7-7, FM 7-8, FM 21-18, and STP 21-24-SMCT.
Standards:	Implemented platoon tactical operations IAW FM 6-22.5, FM 7-7, FM 7-8, FM 21-18, and STP 21-24-SMCT. • Conducted tactical road march. • Performed duties of a Convoy Commander. • Managed and occupied as assembly area. • Prepared platoon defensive operations. • Consolidated and reorganized while in the defense. • Supervised the handling of enemy prisoners and equipment.

ELO A Identify the skills required to supervise a platoon tactical road march.
ELO B Identify the skills required to perform the duties of a convoy commander.
ELO C Identify the responsibilities of the platoon sergeant during occupation and management of an assembly area.
ELO D Identify the steps to prepare for platoon defensive operations.
ELO E Identify the tasks required during consolidation and reorganization while in the defense.
ELO F Identify the steps required to properly handle enemy personnel and equipment at the unit level.
ELO G Identify the effects of continuous operations on personnel.

Study Assignment The student assignments for this lesson are:

- Study FM 6-22.5, Chapter 4.
- Read FM 7-7, Appendix Q, pages Q-6 thru Q-8.
- Read FM 7-8, pages 1-10, 2-2, 2-3, 2-8, 2-21, 2-58, 2-70, 2-72, 2-76, 2-80 thru 2-82, 2-85, 5-22, and 5-23.
- Read FM 21-18, pages 3-1 thru 3-7, and pages 4-1 thru 4-15.
- Read STP 21-24-SMCT, pages 3-166, 3-219 and 3-220, 3-241 thru 3-243, 3-264, and 3-303 thru 3-307.

Additional Subject Area Resources	None
Bring to Class	• Pen or pencil and writing paper. • All reference material received for this lesson.

Student Handout 2

This student handout contains extracts from FM 6-22.5, Chapter 4

Chapter 4

Sleep Deprivation

4001. CHALLENGES OF SLEEP DEPRIVATION

People accumulate a "sleep debt" (cumulative loss of sleep over time) when they perform under limited sleep conditions. The only corrective measure for satisfying this sleep debt is sleep itself. Military operations, by their demanding nature, create situations where obtaining needed sleep will be difficult or impossible for more than short periods.

Continuous operations are military operations with many pulses of action every day and night, continuing for several days to weeks, which require careful planning and resource allocation to give everyone a minimum of 4 hours sleep in 24. (FM 22-51)

Sustained operations are continuous operations or combat with opportunity for less than 4 hours sleep per 24 hours for significant personnel, which may be brief or fragmented. (FM 22-51)

Accordingly, service members may have opportunities for only limited or fragmented sleep over an extended period. As a result of these periods of sleep loss, several combat tasks are likely to show decreased performance. These tasks include the following:

- Orientation with friendly and enemy forces (knowledge of the squad's location and maintaining camouflage, cover, and concealment).

- Coordination and information processing (coordinating firing with other vehicles and dismounted elements, reporting vehicle readiness, and communicating with the headquarters).
- Combat activity (firing from bounding vehicle, checking the condition of weapons, observing the terrain for enemy presence).
- Force preservation and regrouping (covering disengaging squads, marking the routes between locations, and conducting reconnaissance).
- Command and control activity (directing location repositioning, directing mounted defense, assigning fire zones and targets).

Continuous operations will potentially be more commonplace on the battlefield. In offensive operations, darkness is the time to retain or gain the initiative; while in defensive operations, obstacles can be employed with greater security during darkness. Forces can disengage undetected and threats to close air support lessen. The physical environment changes at night. As the air cools below ground temperature, inversions reduce visibility and hamper radar and radio signals. Conditions are optimal for using chemical weapons. Visual changes also occur. Without the aid of white light, there is no color perception. There is also a decrease in visual clarity, field of view, and depth perception. Targets take longer to engage. Preparation time increases two-fold to six-fold. Simple actions, such as the departure and return of patrols, become more complex and dangerous. Nighttime planning and coordination require greater attention. Navigation, adjusting fire, and munitions and/or target matching are more difficult. Precision is essential, but accuracy has a price. Service members tend to maintain accuracy at the sacrifice of speed. The adverse conditions associated with or generated by continuous ground combat at night will degrade the fighting performance of Service members, teams, and units. The almost complete mechanization of

land combat forces and technological advances that permit effective movement at night, during poor weather conditions, and under conditions of limited visibility have largely overcome the reasons for "traditional" pauses in battle, such as darkness, resupply, and regrouping. New technologies have significantly increased the range, reduced the time, and changed the conditions over which battles are fought. For example, day/night-capable vehicles can operate for extended periods without re-supply, but they are limited by a crew's need to sleep. A Service member is not a machine and is, therefore, the weak link in the chain. The equipment can operate longer than the Service member who operates it, as the Service member must have sleep.

Commanders and leaders must ensure that all Service members obtain enough rest to counteract the effects of rapidly shifting from daytime to nighttime duty hours, or to extended work schedules. Implementing countermeasures that are designed to help Service members adapt to continuous operations conditions can satisfy this requirement. Neither leaders nor their subordinates can perform without rest or sleep. The Service member, the unit, and the leader are all affected by continuous operations. Generally at night, the cognitive and physiological resources of Service members are not at their peak, especially after a rapid shift from daytime to nighttime duty hours. Fatigue, fear, feelings of isolation, and loss of confidence may increase.

Non-stop, unrelieved combat operations (sustained operations) with little or no sleep degrade performance and erode mental abilities more rapidly than physical strength and endurance. Information gained from the Army Unit Resiliency Analysis Model shows that even healthy young Service members who eat and drink properly experience a 25 percent loss in mental performance for each successive 24-hour period without sleep. The mental parameters include decisionmaking, reasoning, memory

tasks, and computational tasks. The loss may be greater for Service members who are older, less physically fit, or who do not eat and drink properly.

The effects of sustained operations are sometimes hidden and difficult to detect. Units are obviously impaired when Service members are killed or wounded in action or become noncombatant losses. They are further impaired when their troops are too tired to perform their tasks. Unlike individual performance, unit performance does not deteriorate gradually. Units fail catastrophically, with little warning.

A priority for fighting units is to assure that commanders and leaders are rested and able to think clearly. While this is obvious, it is a most difficult lesson for leaders to learn. During combat, commanders must focus on the human factor. They must assess and strengthen their units as they plan and fight battles. They must accurately decipher which units must lead, which must be replaced, where the effort must be reinforced, and where tenacity or audacity and subsequent success can be exploited. When leaders begin to fail, control and direction become ineffective, and the organization disintegrates. No fighting unit can endure when its primary objectives are no longer coordinated. Leaders must also prepare and precondition Service members to survive. It is particularly important that leaders conscientiously plan and implement effective sleep plans, because activities that are most dependent on reasoning, thinking, problem solving, and decision-making are those that suffer most when sleep and rest are neglected.

Some leaders wrongly believe that their round-the-clock presence during an operation is mandatory; they are unwilling to recognize that they, too, are subject to the effects of sleep deprivation. If the unit has been regularly trained according to the mission command philosophy, two benefits accrue. Not only will a leader be confident that in his absence his subordinates will adhere to his intent,

but the trust he shows in his subordinates will continue to maintain unit morale and help ease some of the stress of the situation.

In future operations, the battlefield will become increasingly lethal. The threat of nuclear, biological, and chemical weapons will maximize confusion, uncertainty, and stress, which adversely impact our ability to move, shoot, communicate, and sustain. Sleep loss in this type of environment increases an already stressful situation.

4002. EFFECTS OF SUSTAINED OPERATIONS ON PERFORMANCE

A basic rule for continuous operations is planning ahead to avoid sustained operations, and provide members 5 to 6 hours sleep in 24. However, missions or enemy actions sometimes require exceptional exertion for several days with only unpredictable, fragmented sleep—as required in sustained operations. Sustained combat leads to exhaustion and reduction in effective task performance. Even during the first night of combat, normal sleeping habits and routines are abnormal. The Service member feels the effects of fatigue and the pressure of stress from noise, disrupted sleep time, and threat to life. While essential for endurance, sheer determination cannot offset the mounting effects of adverse conditions. Cognitive degradation involving poor decisionmaking begins during and after the first 24 hours of sleep deprivation.

Individual and unit military effectiveness is dependent upon initiative, motivation, physical strength, endurance, and the ability to think clearly, accurately, and quickly. The longer a Service member goes without sleep, the more his thinking slows and becomes confused. Lapses in attention occur, and speed is sacrificed to maintain accuracy. Continuous work declines more rapidly than intermittent work.

Tasks such as requesting fire, integrating range cards, establishing positions, and coordinating squad tactics become more difficult than well-practiced, routine physical tasks, such as loading magazines and marching. Without sleep, Service members can perform the simpler and/or clearer tasks—lifting, digging, and marching—longer than the more complicated or ambiguous tasks such as a fine hand-eye coordination sequence; i.e., tracking a target through a scope.

Sleep loss affects memory, reasoning, mental assessments, decision-making, problem-solving, subsequent actions, and overall effectiveness. While comprehension is accurate, reading speed slows and recall fails. For example, Service members may understand orders when reading them in documents, yet they are forgotten later when required. Individuals will forget or omit assigned tasks more often than they will make errors in carrying them out.

Leaders can expect declining moods, motivation, initiative, planning ability, and preventive maintenance. High motivation will only increase risk, due to impaired performance. Leaders must recognize erratic or unreliable task performance in subordinates, as well as in themselves. Alertness and performance decline gradually with partial sleep deprivation; that is, when sleep is limited to 4 to 5 hours per night. After 5 to 7 days of partial sleep deprivation, alertness and performance decline to the same low levels as those following 2 days of total sleep deprivation. After 48 to 72 hours without sleep, personnel become militarily ineffective.

Adverse Conditions

Continuous combat forces Service members to perform under adverse conditions that cause degradation in performance. Examples of adverse conditions follow.

Low Light Level
The amount of light available for seeing landmarks, targets, and maps is greatly reduced at twilight and night.

Limited Visibility
Smoke, fog, rain, snow, ice, and glare degrade a Service member's ability to see his environment and objects within it, as opposed to situations free of such conditions.

Disrupted Sleep Routines
People are accustomed to being awake or asleep during certain hours of the day or night. Disruption of the normal sleeping schedule causes degraded performance.

Physical Fatigue
Working the muscles faster than they can be supplied with oxygen and fuel rapidly creates "oxygen debt," eventually making these muscles unable to function until the deficits are made up during brief rests.

Sleep Loss
The muscles can continue to function adequately without sleep, but the brain cannot. Increasing sleep debt leads to subtle, but potentially critical, performance failures.

Sleep Loss Indicators

Indications of degraded performance symptoms become more prevalent as sleep debt accumulates. Performance is affected by the hours of wakefulness, tolerance to sleep loss, and the types of mental or physical work. Both mental and physical changes occur, with symptoms varying among individuals. Leaders must observe Service members for the following indications of sleep loss and degraded performance:

- Physical changes in appearance, including vacant stares, bloodshot eyes, pale skin, and poor personal hygiene. Other physical signs of sleep loss include the body swaying when standing, sudden dropping of the chin when sitting, occasional loss of hand-grip strength, walking into obstacles or ditches, low body temperature, slowed heart rate, and slurred speech.
- Mood changes, decreased willingness to work, and diminished performance go hand-in-hand. Service members may experience decreasing levels of energy, alertness, interest in their surroundings, and cheerfulness with a concurrent increase in irritability, negativity, and sleepiness. Some become depressed and apathetic. Others, for a time, can become energized by sleep loss, talk more, and may be more assertive without necessarily maintaining good judgment. Sleepiness and mood changes are not signs of weakness. After long periods of sleep loss, Service members go from being irritable and negative to dull and weary.
- Service members may feel more effort is needed to perform a physical task in the morning than in the afternoon. Exaggerated feelings of physical exertion may lead to work stoppage, especially between 0400 and 0700. During that time, the tendency to fall asleep is considerably more noticeable than other times.
- Both bickering and irritability increase with sleep loss. When Service members argue, it shows that they are still talking to each other and exchanging orders and messages. When arguments cease, especially after a period of increased bickering, Service members may be in a state of mental exhaustion.
- Comprehension and perception slow considerably. Individuals require extended time to understand oral, written or coded information; to find a location on a map and/or chart coordinates; to interpret changes in enemy fire patterns; and to make sense of things seen or heard, especially patterns. They may

have difficulty with spot status or damage reports, and may be unable to assess simple tactical situations.

Loss of Concentration

Sleep deprivation causes the attention span to shorten. There is a loss of concentration on the job as dream-like thoughts cause lapses in attention. Leaders should watch for the following:

- Decreased vigilance. Personnel are less alert and fail to detect the appearance of targets, especially in monotonous environments. They may doze off at the wheel of moving vehicles.

- Distorted attention. Service members may imagine seeing things that are not there, e.g., "moving" bushes when in reality there is no such movement. The sleep-deprived brain can also misperceive bushes, rocks, people, vehicles or anything else and see them as something different, in very precise detail. Often the tired brain "sees" what it wishes were there (food, a bed); at other times, these illusions may be animals or other more bizarre things. But when the mind is alert for an enemy, the brain may generate a very convincing, detailed image of the enemy. Sometimes, but not usually, sounds or other sensations may accompany these illusions. They usually last only seconds, but can persist for minutes if not challenged, and rarely have even been "seen" by equally sleep-deprived comrades when told of them. It is essential for sleep-deprived unit members to check out any questionable things they see with their comrades, and to faithfully follow reporting and challenge procedures.
- Inability to concentrate; easily confused. Service members cannot keep their minds on what they are doing. They cannot follow multiple directions nor perform numerical calculations.

- Failure to complete routine tasks. Sleep loss interferes with completing routine individual tasks, such as drying the feet, changing socks or filling canteens when water is available. Tasks such as performing weapons checks may be skipped.

When a Service member cannot recall what he just saw, read, heard or was told by another individual, he is exhibiting a common sign of sleep loss. His memory loss is limited to recent events. For example, a sleep-deprived Service member may forget recent target data elements or recall them incorrectly and have difficulty learning new information.

4003. ACHIEVING SLEEP IN COMBAT

Sleep deprivation produces stress and, therefore, sleep management is important. Sleep management is a combat multiplier. Planned sleep routines are important for keeping the unit, the individual Service members, and the leader himself functioning as required while reducing sleepiness during continuous combat. Since leaders are responsible for planning sleep routines, they need a basic understanding of the physiological and behavioral aspects of sleep and their impact on performance. The following paragraphs provide this information.

Rhythmic Variations

There are rhythmic variations in individual performance based on a predictable physiological and behavioral cycle that comprises about 24 hours. The 24-hour, day-night/work-rest cycle is called the *circadian rhythm*. Because traveling across a half-dozen time zones disrupts the usual relationship in the day-night/work-rest cycle, for a few days Service members are not sleepiest at their usual sleep period of 2400 to 0600, new-locale time. Allowing

sleep about 1200 to 1800, new-locale time, will only delay their adaptation to their new locale. Leaders must instruct troops to go to bed between 2400 and 0600 new-local time to establish a new circadian rhythm.

Another example of circadian rhythm is body temperature. Although one's "normal" temperature is 98.6 degrees, this is really an average or midpoint of a daily swing from 96.8 to 100.8 degrees. For someone accustomed to working days and sleeping nights, body temperature would fluctuate approximately as indicated. There is a well-established link between body temperature and sleepiness and/or performance slumps. Performance parallels body temperature. The higher the body temperature, the better the performance. As body temperature decreases, mood and motivation decline with a concurrent increase in sleepiness and fatigue.

Impact upon performance is most pronounced during the *circadian lull*, which is roughly 0200 to 0600 hours. During this time, performance declines about 10 to 15 percent. In sleep-deprived Service members, this decline may reach 35 to 40 percent. If the day-night/work-rest cycle is disrupted, performance suffers because the Service member is sleepy during the new work period and awake during the new sleep period. The body needs several days to adjust to the new schedule. Critical hours for sleep are between 0200 and 0600 when *anchor sleep* (the most beneficial sleep) is taken. The body is at its lowest temperature during this period. This is the best time for sleeping, but not for napping. To prevent sleep inertia, naps should always be taken at times other than the lowest point in body temperature.

Leaders need to calculate the difference in time zones and make the necessary schedule changes. Leaders will need day-and night-fighting teams. Members acclimated to working days and sleeping nights should be scheduled to work nights and sleep days.

Their performance slump/optimal time to sleep would be 2400 to 0600, new-locale time. Deployment, pre-combat, and combat are not usual circumstances. If certain Service members must have an offset circadian timing from the rest of the unit, a special effort must be made to establish their sleeping time. Obviously, troops must sleep whenever possible. If a planned sleep schedule cannot be followed, however, performance is enhanced if sleep coincides with the low point in body temperature.

Adjusting to new circadian rhythms is a slow process, taking 3 to 6 days to come "in phase" with a new schedule. Leaders should devise a sleep schedule that provides for sleep at the same time of day or night every 24 hours. Sleep schedules that provide for sleep at different times of day or night are less valuable and are detrimental to quality sleep and optimal performance.

Sleep Shifts

Staggered work schedules can be set up for two shifts working 4 hours on/4 hours off, 6 hours on/6 hours off, and 12 hours on/12 hours off. See Table 4-1. Each shift follows the same schedule daily. It is better to maintain regular shift schedules than schedules that continually change.

Sleep/Rest Guidelines

Leaders should use the following sleep and/or rest guidelines in this section to enhance individual and the unit performance in continuous operations.

- Know personal tolerance for sleep loss and those under your command; major individual differences are not easily changed. Individuals who are unable to sleep during predeployment and deployment stages should be encouraged to practice relaxation exercises (see paragraph 2005).

Table 4-1. Sleep Shifts.

4 HOURS ON/4 HOURS OFF						
Shift	2400-0400	0400-0800	0800-1200	1200-1600	1600-2000	2000-2400
1	SLEEP	DUTY	SLEEP	DUTY	SLEEP	DUTY
2	DUTY	SLEEP	DUTY	SLEEP	DUTY	SLEEP

6 HOURS ON/6 HOURS OFF				
Shift	2400-0600	0600-1200	1200-1800	1800-2400
1	SLEEP	DUTY	SLEEP	DUTY
2	DUTY	SLEEP	DUTY	SLEEP

12 HOURS ON/ 12 HOURS OFF		
Shift	2400-1200	1200-2400
1	SLEEP	DUTY
2	DUTY	SLEEP

- Ensure that Service members fully use their breaks and other opportunities for rest. Encourage them to waste no time in getting to sleep. Undisturbed, prolonged sleep is the most desirable use of rest opportunities. When there has been sleep loss but little physical exertion (e.g., manning communications, operating a radio), mild physical exercise such as walking around when conditions permit, can help maintain alertness.
- Encourage Service members to sleep, not just rest, by creating the most conducive environment possible for sleep: quiet, without interruptions (or earplugs); dimness or darkness (or with eye cover); not overly warm or cold.

- Do not allow personnel to sleep in unsafe conditions. Enforce strict rules designating sleep areas and requiring perimeter guards. Require day and night guides for all vehicles to prevent Service members from being accidentally run over.
- Ensure that Service members follow sleep schedules or routines. The field commander who does not enforce a sleep schedule or routine leads his troops into an environment that increases the opportunity for hazardous conditions to be encountered while in continuous combat. Taking naps is not a sign of low fighting spirit or weakness; it is a sign of foresight.

Measuring Sleep Loss

Sleep loss can be measured by:

- Keeping a sleep and/or activity log. From pre-deployment to post-deployment, log sleep and nap periods. Service members need 4 to 5 hours per 24-hour period; 6 or 7 hours is optimum. If they receive less, the first chance for a long rest period must be used for sleep.
- Observing performance and asking questions. Look for the indications of sleep loss—such as increase in error occurrence, irritability, difficulty understanding information, and attention lapses—with concurrent decreases in initiative, short-term memory, and attention to personal hygiene. Confirm sleep loss by asking the obvious question: “When did you sleep last and how long did you sleep?”

Sleep Loss Alternatives

Ways to overcome performance degradation include:

- Upon signs of diminished performance, find time for members to nap, change routines or rotate jobs (if cross-trained).

- Have the Service members most affected by sleep loss execute a self-paced task.
- Have Service members execute a task as a team, using the buddy system.
- Do not allow Service members to be awakened for meals while in flight to a new location, especially if the time zone of the destination is several hours different than that of point of departure.
- Insist that Service members empty their bladder before going to bed. Awakening to urinate interrupts sleep, and getting in and out of bed may disturb others and interrupt their sleep.
- Allocate sleep by priority. Leaders, on whose decisions mission success and unit survival depend, must get the highest priority and largest allocation of sleep. Second priority is given to Service members that have guard duty and to those whose jobs require them to perform calculations, make judgments, sustain attention, evaluate information, and perform tasks that require a degree of precision and alertness.

4004. SLEEP/REST PLANNING

Sleep/rest planning applies to the pre-deployment, deployment, pre-combat, combat, and post-combat stages of battle.

Pre-Deployment Stage

Using mission-scenario operation guidelines, determine periods available for sleep and the total number of sleep hours possible. Because continuous operations requirements may change, alternate sleep routines should be planned. Become familiar with the area where the combat unit will sleep; For example, some may

have to sleep in mission-oriented protective posture (MOPP) IV. If sleeping in MOPP IV is anticipated in combat, practice it during the pre-deployment stage. Prior experience reduces stress, so practice anticipated sleep routines before continuous operations.

Deployment Stage

Since sleep will be reduced during deployment, follow pre-planned sleep routines. The prudent commander will choose a 4-hour on/4-hour off, 6-hour on/6-hour off, or 12-hour on/12-hour off shifts from the start. Take into account that Service members on night duty will need to sleep during the daytime. Provide night-shift personnel with separate sleeping quarters to avoid disruption of their sleep period.

Pre-Combat Stage

In general, people are most effective during the afternoon and are least effective just before dawn. Without prior adjustment to the new time zone, which naturally occurs in 3 to 5 days, leaders can expect degraded daytime performance. The reason is that 0200 to 0600 hours home-base time is the low point in performance efficiency and should be considered when planning workloads.

Combat Stage

Every effort should be made to avoid situations where all personnel are physically and mentally exhausted simultaneously. Make the most of any lull during the combat phase by sleeping briefly. Complete recovery from sleep loss may not be possible during intense combat, but limited sleep is helpful. Uninterrupted short sleeps of 15 minutes or longer are beneficial to partially recovering alertness. Sleep during the combat stage may be risky, how-

ever, because a Service member may wake up feeling groggy, confused, sluggish, and uncoordinated. It may take his brain from several seconds to 15 minutes to "warm up." Individuals differ in how quickly they take to wake up, but it tends to be worse when the body expected to go into deep sleep, and to get worse with increasing sleep loss. Activities that increase circulation of warm blood to the brain, like moderate exercise or drinking a hot beverage, may shorten the start-up time.

Post-Combat Stage

It is important to make up sleep debt, but experts disagree about the amount of recovery time needed. Some say the hours of sleep needed for recovery after sleep deprivation are less than the amount lost. It is well known and documented that lost sleep is not made up hour-for-hour. Most experts agree that immediately following continuous combat, Service members should be allowed to sleep up to 10 hours. Longer sleep periods are not desirable because they cause "sleep drunkenness" and delay in getting back to a normal schedule. After the first sleep period of up to 10 hours, Service members should return to the regular sleep routine. Sleep inertia lasting longer than 5 to 15 minutes and increased sleepiness may occur for as long as a week following sustained combat. Some experts recommend that 4 of the first 8 hours of recovery sleep should be at the 0200 to 0600 sleep time, and they suggest the following guidelines for complete recovery from the effects of sleep loss:

- 12 hours for sleep and rest after 36 to 48 hours of complete sleep loss with light to moderate work load (fatigue may linger for 3 days).
- 24 hours for sleep and rest after 36 to 48 hours of sleep loss with high workload (12 to 16 hours per day).

- 2 to 3 days time off after 72 hours or more of acute sleep loss.
- As much as 5 days for sleep and rest following 96 hours or more of complete sleep loss.

Most experts agree that 10 hours of sleep is the maximum needed, with the additional 2 hours used for rest. It is doubtful that a Service member could continue past 72 hours of wakefulness. Should this occur, a couple of nights with 10 hours of sleep are more beneficial than an excess of 10 hours during one sleep period. If Service members have not slept for 36 to 48 hours or more, they should avoid sleep of less than 2 hours, especially between 0400 and 0600. A too-short sleep period at the wrong time may cause a long period of sleep inertia. After 96 hours of total wakefulness, 4 hours of sleep may provide substantial recovery for the simpler, less-vulnerable tasks. Recovery continues with additional days of 4 hours of sleep per 24 hours. Complex leadership tasks may require longer recovery sleep, but sleep until fully satisfied is not necessary.

Sleep loss alone does not cause permanent health problems, nor does it cause mentally healthy people to become mentally ill. Reduced sleep (from 8 to 4 hours) does not cause physical harm. Hallucinations may occur, but they disappear after recovery sleep. Clinical laboratory tests show that total sleep loss of over a week does not pose serious health problems. It is doubtful that Service members could stay awake for such an extended period, and it is not suggested that Service members try to endure long periods without rest. However, the effects of sleep loss, such as inattentiveness and poor judgment, may be harmful (such as falling asleep at the wheel of a vehicle).

Sleep cannot be stored in our bodies for emergency use. Sleep of more than 7 to 8 hours before deployment does not “store up”

excess sleep, but sleep taken immediately before a deployment can prolong activity. Therefore, it is important to begin continuous operations in a rested state. During daytime or early morning naps, many Service members experience vivid dreams as they fall asleep and often wake up frightened. Leaders should inform their troops that this occurrence is both common and normal during daytime sleep. If a single, unbroken period of 4 to 5 hours is not available for sleep, "power naps" of 15 to 30 minutes, although less recuperative, can be taken. Leaders must capitalize on every opportunity for a "power nap." Merely resting by stretching out does not take the place of sleep. Only sleep can satisfy the need for sleep.

Student Handout 3

This student handout contains extracts from FM 7-7, Appendix Q, pages 6-8.

APPENDIX Q

TACTICAL ROAD MARCHES AND ASSEMBLY AREAS

Section I. TACTICAL ROAD MARCHES

Q-1. GENERAL

The ground movement of troops can be accomplished by administrative marches, tactical movements, and tactical marches.

Although administrative marches may break up unit integrity they are used in rear areas where speed and best use of transportation assets expedite movement.

Tactical movements, as described in chapter 4, are used when contact with enemy forces is a possibility.

Tactical marches are normally used to move units from rear areas to assembly areas in preparation for the conduct of a mission. Although a company may be required to conduct a tactical march, the platoon and company normally move as part of the battalion.

The tactical march is conducted when speed is essential, unit integrity must be maintained, road nets are available, and enemy contact is limited.

The following definitions apply to tactical road marches and foot marches:

ARRIVAL TIME. The time the head of a column reaches a designated point or line.

CLEARANCE TIME. The time the tail of a column passes a designated point or line.

COLUMN (TIME) GAP. The space between two consecutive elements calculated in units of length (meters) or units of time (minutes), measured from the rear of one element to the front of the following element.

COMPLETION TIME. The time the tail of a column passes the release point.

CRITICAL POINT. A selected point along the route of march used for reference in giving instructions; any point along the route where interference with the troop movement may occur.

MARCH UNIT. A unit that moves and halts at the command of a single commander — normally one of the smaller troop units such as a platoon or company.

PACE SETTER (VEHICLE). A vehicle in the lead element and responsible for regulating speed.

PASS TIME. The time between the movement of the first element past a given point and the movement of the last element past the same point.

RATE OF MARCH. The average kilometers-per-hour traveled.

CONTENTS

RELEASE POINT. A well-defined point on a route at which the elements composing a column return to the authority of their respective commanders.

SERIAL. A grouping of march units under a single commander. It is usually a battalion, brigade, or larger unit. For convenience in planning, scheduling, and control, it is given a numerical or alphabetical designation.

START POINT. A well-defined point on a route where the elements of the move come under the control of the movement commander. It is at this point that the column is formed by the successive passing of each of the elements in the column.

VEHICLE DISTANCE. The space between two consecutive vehicles of an element in the column.

ORGANIZATION OF A MARCH COLUMN. Depending on the size and number of units conducting the move, the battalion is normally formed as a serial with companies and elements of headquarters and headquarters company formed into march units. The entire column is organized into an advance party, main body, and trail party. The advance party consists of a reconnaissance element and a quartering party the trail party is made up of maintenance, recovery, and medical elements; and the main body is made up of the rest of the force.

VEHICLE DISPERSION. The move can be conducted with vehicles traveling in close column, in open column, or by infiltration. Which method to use is determined by the degree of control required to maintain a cohesive unit, and by the terrain that is being traveled — for example, open terrain requires more dispersion than close terrain.

In close column, vehicles are spaced approximately 25 meters apart during daylight. At night, and during reduced visibility vehicles are spaced so that the driver and TL can see the two lights in the blackout marker of the vehicle ahead, if not the vehicle itself. This method takes maximum advantage of traffic capacity of routes but provides little dispersion. Close column is normally used for marches during darkness, and under blackout conditions, and to move rapidly through urban areas to insure integrity and control of the column.

In open columns, the distance between vehicles is increased to provide greater dispersion. Vehicle distance varies from 50 to 100 meters. The increased distance provides greater protection against air and artillery fires, and ground attack by small enemy forces. It also allows the command vehicle and other vehicles not restricted by march orders to pass the column without disrupting its organization.

During a move by infiltration, vehicles are dispatched individually as small groups, or at irregular intervals at a rate that will keep traffic density down and prevent undue massing of vehicles. Infiltration provides the best possible defense against enemy observation and attack. It is suited for tactical road marches when enough time and road space are available and when maximum security, deception, and dispersion are desired.

When vehicles are farther apart than prescribed in open/closed column, they close up by traveling at a prescribed higher speed. This catch-up speed is normally fast enough to allow the column to close up over a long road distance, thus reducing the accordion effect produced by rapid changes in speed. A fixed catch-up

speed also provides an additional satiety factor for the march.

Q-2. CONDUCT OF THE TACTICAL ROAD MARCH

The movement order issued by the company commander includes information on the enemy and friendly situations, destination, route, rate-of-march, catch-up speed, order of march, start point, location and time, vehicle distances, release points, critical points, combat service support, communications, and location of the commander during the march. Many items of a movement order are SOP. Along with the order, the commander normally issues strip maps of the route. A strip map is a sketch of the route of march and contains as a minimum a start point, a release point, and critical points and distances between them. Strip maps should be issued to each squad leader or TL.

Before starting, each march unit has a designated team reconnoiter its route to the start point and determine the amount of time needed to reach it. The company also forms a quartering party element. It links up with the battalion quartering party before moving to the new assembly area. The company quartering party is normally headed by the executive officer or first sergeant and consists of representatives from platoons, company headquarters, and attached elements as necessary The platoon sergeant and other designated persons may be assigned this duty. The battalion and company quartering parties move to the new assembly area before the main body moves. The quartering parties normally move by infiltration. Quartering party activities are a matter of SOP but should include:

Securing the new assembly area.

Searching for indications of enemy activity.

Looking for mines and booby traps.

Selecting routes to platoon locations.

Selecting initial vehicle positions.

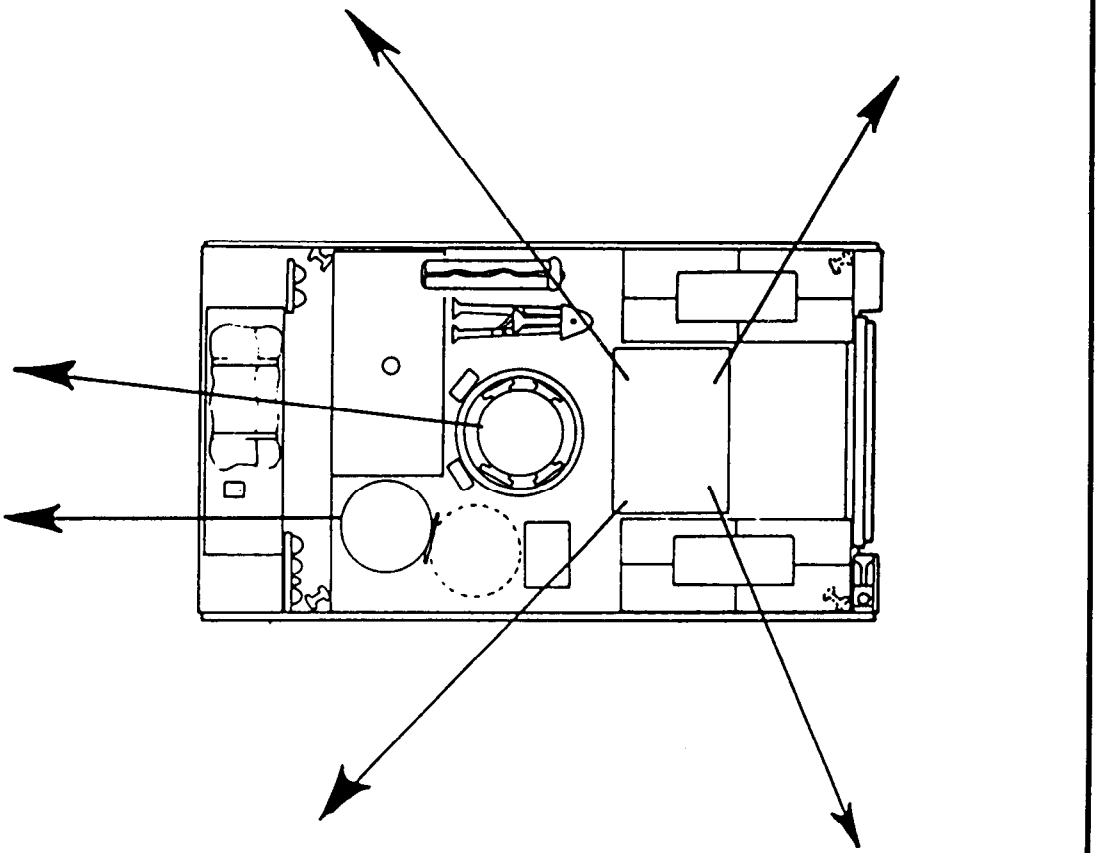
Selecting initial machine gun and Dragon positions.

Meeting platoons at the company release point and guiding vehicles into position.

Although some movement and lining up may be required before starting the move to the start point, ideally vehicles move from their positions directly into their proper place in the march unit. The march unit should proceed to the start point without stopping, arrive there on time, and pass through the start point at the proper speed and interval between vehicles.

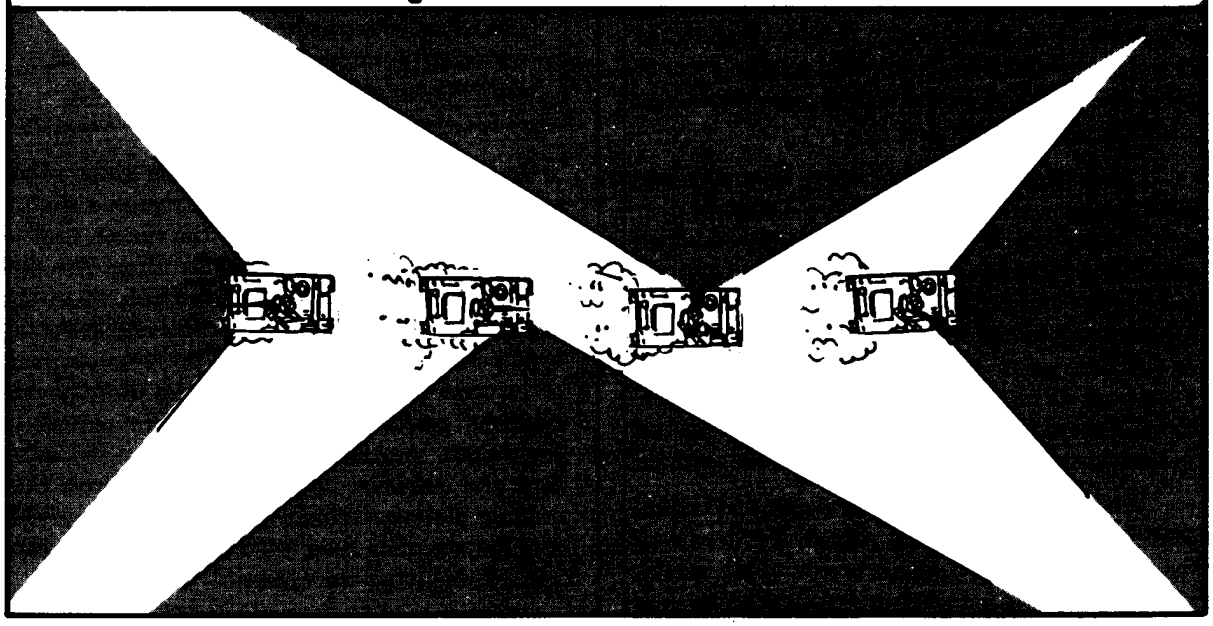
During the move, the crew of each carrier maintains 360-degree observation around the vehicle. The driver observes forward, the squad leader observes to the left of the caliber .50 machine gun, and the gunner observes to the right of the caliber .50 machine gun. Troops inside the cargo hatch observe to the left, right, and rear depending on their location.

Figure Q-1. SECTORS OF OBSERVATION.



Within the patoon column, each vehicle is assigned a sector of fire for the move. Each vehicle orients its caliber .50 machine gun and/or Dragon so that they can rapidly fire on targets within their sector. The assignment of sectors of fire, coupled with the capability of firing from the cargo hatch, provides the platoon with 360-degree security while on the move.

Figure Q-2. SECTORS OF FIRE.



During the move, the platoon must be prepared to take action if attacked by enemy air, artillery, or ground forces. Passive measures against enemy air include:

Maintaining proper interval between vehicles.

Staggering vehicle positions within the column to avoid linear patterns.

Camouflaging vehicles.

Maintaining air observation.

If attacked by enemy air, vehicles in the column move from the axis of attack, either occupying covered and concealed positions or continuing to move, maintaining an evasive course. The unit also engages the aircraft with all available weapons.

If the column receives indirect fire during the move, button-up the vehicle, mask, and move rapidly out of the impact area. Masking is necessary because the enemy can use a mix of HE and chemical ammunition to disrupt movement and achieve maximum casualties. After the company team is through the impact area, the march unit commander will start unmasking procedures.

If engaged by enemy ground forces while on a tactical road march, vehicles attempt to continue movement, or the platoon leader may elect to assault the enemy or fix the enemy for other forces to attack.

Because the primary mission of the unit is to move to a new location in preparation for future operations, additional actions against ground forces depend on the size of the enemy force and instructions from the company team/march unit commanders. If the enemy force consists of snipers or other disruptive forces equipped with small arms, the commander may pass through the force or dispatch a platoon to eliminate it. If the force is larger and presents a danger to the task force as a whole, fragmentary orders may be issued for march unite to leave the route of march, move to covered and concealed positions, and conduct a hasty attack as if conducting a movement to contact.

A march unit can conduct the kinds of halts: scheduled, unscheduled, and vehicle breakdown.

Scheduled halts are planned for maintenance and rest, or to comply with higher level time schedules. At scheduled halts, vehicles pull to the aids of the road but still maintain march distance between vehicles. Dismount teams dismount and establish local security.

Unscheduled halts are caused by unforeseen developments such as obstacles, ambushes, or other enemy activity forward of the platoon which prohibits further movement. If off-road movement is possible, the company team forms a coil for hasty perimeter defense. Platoons occupy a sector of the coil using the clock system. If off-road movement is not possible, the company team forms a herringbone. Dismount teams dismount in heavily wooded areas to improve local security.

When a vehicle becomes disabled and cannot continue the move, the TL directs the driver off the road, so as not to impede traffic. If the vehicle blocks the road, it is towed or pushed away to clear the road. Once the vehicle is clear of the road, the carrier team attempts to repair the vehicle while the dismount team establishes security provides guides, and directs traffic. The platoon to which the disabled vehicle belongs normally continues to move. If the crew gets the vehicle repaired and if the march unit has not passed completely the crew and vehicle rejoin the march unit at the tail end. If the march column has passed, or the crew could not repair the vehicle, the vehicle waits for the serial's trail party. The trail party repairs the vehicle or it tows the vehicle to the battalion assembly, area (location of battalion trains). (On occasion, when fighting strength is critical, the platoon will crossload the disabled vehicle's dismount teams and squad leader.)

NOTE: If the platoon leader's carrier is disabled, the platoon leader moves to another vehicle. If space is available, the FO team should be crossloaded.

On arrival at the battalion RP, the leader of the company team's quartering party moves from a concealed position and guides the march unit to the company RP. Platoon guides direct the platoon's vehicle to their general locations, where the squad leaders (TLs) assume control and select vehicle positions. Vehicles should not stop on roads or in open fields, but should move directly into concealed positions. Normally the first platoon in the column is guided to positions farthest away from the entrance into the assembly area. Succeeding platoons should move as far as possible into the assembly area, with the last platoon closing and securing the entrance.

If the company team must move into an unprepared assembly area, the clock system can be used to rapidly establish a perimeter defense and road security Normally direction of movement is 12 o'clock. The lead platoon usually takes up a third of the perimeter in the sector from 10 o'clock to 2 o'clock with succeeding platoons breaking off left and right, according to the company's SOP.

When movement into an assembly area is conducted at night, platoon guides must use easily recognizable visual signals to insure that the vehicles follow the proper guides. Use of different colored flashlight lenses is one method of identifying platoon guides.

Section II. ASSEMBLY AREAS

Q-3. GENERAL

An assembly area (AA) is occupied by a unit to prepare for future operations. The mechanized infantry platoon normally occupies a portion of the company team AA. The AA is on defensible ground. It should provide concealment, room for dispersion, and good internal routes, as well as provide access to routes forward. Even though an AA is not expected to be a battle position, an all-round defense is organized with men and equipment positioned or dug into provide security from ground and air attack. The amount of preparation at an AA depends on the unit's intended stay

Leaders insure that personnel continue to improve positions until the unit moves.

Priority of work at an AA is normally a matter of SOP, but it may be part of the movement or operation order. Although commanders may have differing priorities, the following are normally included, in the order listed:

(1) Establish local security by dispatching OPs, which should have wire communications with the platoon and be equipped with the M8 chemical-agent alarm. At platoon positions, local security is further achieved by alternating troops from work to watching, thus keeping roughly half the force providing security.

(2) Position vehicles and crew. served weapons where they can best be employed. If Dragons cannot be employed because of terrain restrictions, they should not be dismounted.

(3) Establish communications within the platoon and to the company CP. The platoon sets up a hot loop, connecting the squads to the platoon leader's vehicle by telephone (TA1). To speed the establishment of telephone communications, the platoon leader can take a member of the platoon headquarters element with him to the company CP. As he returns to the platoon AA, a land telephone line can be reeled out from the company CP back to his vehicle. Also, the platoon leader has a person who knows where the company CP is should a messenger be needed. In the AA, radio use at platoon and squad level should be restricted to radio listening silence.

(4) Position remaining squad members. As in the defense, the remaining squad members are positioned to provide security for crew-served weapons, to cover dead space, and to cover avenues of approach. Dismounted troops should prepare hasty fighting positions initially. The following is required:

Clear fields of fire.

Tie in fires between squads and platoons so that uncovered gaps do not exist in the defense.

Prepare range cards for vehicle-mounted weapons and dismounted crew-served weapons. Prepare a platoon sector sketch and forward a copy to the company CP.

Camouflage positions by using the appropriate camouflage screens for vehicles and natural material for infantry fighting positions.

(5) Once the basics are accomplished, alternate squad rest periods while working to improve the defense. Improve the defense by digging fighting positions and providing overhead cover, setting out remote sensors, and establishing security patrols.

Q-4. ACTIONS IN ASSEMBLY AREAS

Assembly areas provide the unit a secure defensible position where the unit can prepare for future operations. During and after the establishment of the defense, the following activities may take place:

Leaders receive and issue orders.

The unit maintains its equipment and weapons.

Personnel conduct personal hygiene.

Leaders inspect.

The unit is resupplied to include distribution of ammunition and refueling of vehicles.

The unit rehearses critical aspects of the upcoming operation.

Weapon systems are checked and small arms are test fired, if possible.

Troops eat and rest.

The unit continues to improve its defenses.

Student Handout 4

This student handout contains extracts from FM 7-8, Chapter 1, 2, and 5.

advance. FM 101-5-1 discusses these control measures in detail and provides examples of their use.

f. **Attacks During Limited Visibility.** Attacks during limited visibility achieve surprise, avoid heavy losses, cause panic in a weak and disorganized enemy, exploit success, maintain momentum, and keep pressure on the enemy. Platoons and squads attack whenever possible during limited visibility. Darkness, fog, heavy rain, falling snow, and the smoke and dust of combat create limited visibility conditions that allow infantry platoons and squads to move undetected.

(1) ***Fundamentals.*** The fundamentals for a daylight attack apply to limited visibility attacks. Limited visibility attacks rcquire-

- Well-trained squads.
- Natural light sufficient to employ night vision devices.
- A simple concept with sufficient control measures.
- Detailed, successful reconnaissance of the objective, routes, passage points, support-by-fire positions, and other key locations.

(2) ***Considerations*** Leaders must consider the increased difficulty during limited visibility operations in performing the following:

- Controlling the movement of individuals and squads.
- Identifying targets and controlling direct and indirect fires.
- Navigating and moving.
- Identifying friendly and enemy soldiers.
- Locating, treating, and evacuating casualties.
- Locating and bypassing or breaching enemy obstacles.

1-8. DEFENSE

This paragraph describes the characteristics of defensive operations, the role of the commander's concept in focusing the efforts of platoons and squads in the defense, and other considerations for planning defensive operations. Defensive operations arc characterized by preparation, disruption, concentration, and flexibility. Platoons and squads normally defend as part of a larger force to disrupt, disorganize, delay, or defeat an attacking enemy, deny an area to an enemy, or protect a flank. They may also defend as a part of a larger unit in a retrograde operation. The challenge to the defender is to retain the initiative, that is, to keep the enemy reacting and unable to execute his own plan.

a. **Initiative in the Defense.** Since the enemy decides the time and place of the attack, leaders seize and retain the initiative in the defense through careful planning, preparation, coordination, and rehearsal. Leaders plan and establish the defense to find the enemy first, without being found; fix the enemy with obstacles and fires; locate or create a

merely by a desire for independent action. Leaders must be resourceful enough to adapt to situations as they are, not as they were expected to be.

c. Platoon and squad leaders also must effectively control their subordinates. Control restricts command. Generally, increased control leads to less application of command. Not all control is bad or counter-productive. For example, common doctrine is a form of control in that all leaders expect their subordinates to understand and apply the tenets of doctrine. Another common source of control is the use of graphics for operation overlays. While optional and situationally -dependent, these arc restrictive and must be reviewed by the leader before implementation. Each control measure must have a specific purpose that contributes to mission accomplishment. If it dots not pass this purpose test, it unnecessarily restricts freedom of action and should not be used.

d. Control is necessary to synchronize the actions of elements participating in an operation. The more complex the operation, the greater the amount of control needed. The challenge to leaders is to provide the minimal amount of control required and still allow for decentralized decision making in each situation.

(1) Mission tactics requires that leaders learn how to think rather than what to think. It recognizes that the subordinate is often the only person at the point of decision who can make an informed decision. Guided by the commander's intent, the mission, and the concept of the operation, the leader can make the right decision.

(2) At platoon and squad level useful forms of control include common doctrine, mission, concept of the operation, time, and control measures.

(a) Doctrine, especially the form of battle drills and unit SOPs that prescribe a way of performing a task, provides an element of control. By limiting the ways in which a task is performed to standard, battle drills and unit SOPs provide a common basis for action: allow for quick, practiced response; decrease the probaoiltiy for confusion and loss of cohesion; and reducr the number of decisions to the essential minimum.

(b) The mission statement of the platoon is also a form of control. Its purpose provides the basis for decision and allows freedom of action. Its task provides a basis for establishing the main effort and focuses all other actions toward mission accomplishment.

(c) The concept of the operation identifies the main and supporting efforts for the higher unit and describes how a commander sees the execution of the operation. This allows the maximum possible freedom of action for the subordinate leader tasked with executing the main effort. Leaders executing the supporting effort will have less freedom of action because they must key their actions on the main effort. The concept of

the operation also details the control of fires and other combat multipliers which must be synchronized and focused on the main effort.

(d) Leaders use time to control units or individuals by establishing specifically when a task should begin or be complete. Control using time is especially critical when the platoon's actions must be synchronized with other units or supporting elements.

(c) Another source of control is the use of control measures. These include instructions to subordinate units, fire commands, and the use of ooperational graphics in overlays. While normally optional and situation-ally-dependent, control measures are potentially restrictive and must be reviewed by leaders before incorporating them into their plans. To ensure the proper amount of control, each control measure must have a specific purpose that contributes to mission accomplishment. If it dots not pass (his test, it unnecessarily restricts freedom of action and should not be used.

e. Platoon and squad leaders usc mission tactics to accomplish the mission. They give orders and instructions that communicate the higher commander's intent; the mission (task and purpose) of the unit; and the concept of the operation, to include control measures. They also use mission tactics to ensure that subordinates understand that they are expected to use initiative in making decisions when the situation is no longer what it was expected to be.

2-2 TROOP-LEADING PROCEDURE

Troop leading is the process a leader goes through to prepare his unit to accomplish a tactical mission. It begins when he is alerted for a mission. It starts again when he receives a change or a new mission. The troop-leading procedure comprises the steps listed below. Steps 3 through 8 may not follow a rigid sequence. Many of them may be accomplished concurrently . In combat, rarely will leaders have enough time to go through each step in detail. Leaders must use the procedure as outlined, if only in abbreviated form, to ensure that nothing is left out of planning and preparation, and that their soldiers understand the platoon's and squad's mission and prepare adequately. They continu-ously update their estimates throughout the preparation phase and adjust their plans as appropriate.

STEP 1. Receive the mission.
STEP 2. Issue a warning order.
STEP 3. Make a tentative plan.
STEP 4. Start necessary movement.
STEP 5. Reconnoiter.
STEP 6. Complete the plan.
STEP 7. Issue the complete order.
STEP 8. Supervise.

c. **STEP 3. Make a Tentative Plan.** The leader develops an estimate of the situation to use as the basis for his tentative plan. The estimate is the military decision making process. It consists of five steps: detailed mission analysis, situation analysis and course of action development, analysis of each course of action, comparison of each course of action, and decision. The decision represents the tentative plan. The leader updates the estimate continuously and refines his plan accordingly. He uses this plan as the start point for coordination, reconnaissance, task organization (if required), and movement instructions. He works through this problem solving sequence in as much detail as time available allows. As the basis of his estimate, the leader considers the factors of METT-T:

(1) ***Mission.*** The leader considers his mission as given to him by his commander. He analyzes it in light of the commander's intent two command levels higher, and derives the essential tasks his unit must perform in order to accomplish the mission.

(2) ***Enemy.*** The leader considers the type, size, organization, tactics, and equipment of the enemy he expects to encounter. He identifies their greatest threat to his mission find their greatest vulnerability.

(3) ***Terrain.*** The leader considers the effect of terrain and weather on enemy and friendly forces using the guidelines below (OCOKA):

(a) *Observation and fields of fire.* The leader considers ground that allows him observation of the enemy throughout his area of operation. He considers fields of fire in terms of the characteristics of the weapons available to him; for example, maximum effective range, the requirement for grazing fire, and the arming range and time of flight for antiarmor weapons.

(b) *Cover and concealment.* The Ieader looks for terrain that will protect him from direct and indirect fires (cover) and from aerial and ground observation (concealment)

(c) *Obstacles.* In the attack, the leader considers the effect of restrictive terrain on his ability to maneuver. In the defense, he considers how he will tie in his obstacles to the terrain to disrupt, turn, fix, or block an enemy force and protect his own forces from enemy assault.

(d) *Key terrain.* Key terrain is any locality or area whose seizure or retention affords a marked advantage to either combatant. The leader considers key terrain in his selection of objectives, support positions, and routes in the offense, and on the positioning of his unit in the defense.

(c) *Avenues of approach.* An avenue of approach is an air or ground route of an attacking force of a given size leading to its objective or key terrain in its path. In the offense, the leader identifies the avenue of approach that affords him the greatest protection and places him at the enemy’s most vulnerable spot. In the defense, the leader positions his key

FORMAT	ANNOTATED FORMAT	EXAMPLE, ORAL (ATTACK)	EXAMPLE, ORAL (DEFEND)
5. COMMAND AND SIGNAL.	**5. COMMAND AND SIGNAL.**		
a. Command.	a. Command. (1) Location of the higher unit commander and CP. (2) Location of the platoon leader or CP. (3) Location of the PSG or alternate CP. (4) Succession of command (if different from the SOP).	"Command: Commander will follow us. He will set up CP in the vicinity of the trench line. "I will follow 1st Squad during movement and will assault with 2d Squad. PSG will follow 2d Squad, then move to the support-by-fire position with 1st Squad.	"Command: Commander will be located with main effort. "The platoon CP and the alternate are located here and here (point out on terrain model).
b. Signal.	b. Signal. (1) SOI index in effect. (2) Listening silence, if applicable. (3) Methods of communication in priority. (4) Emergency signals, visual signals. (5) Code words.	"Signal: The number combination password is seven. "The time is now 1007. What are your questions?"	"Signal: Company cease fire signal is two green star clusters followed by one red. "Code word for execution EA FOX with machine gun fire is GOLDSTRIKE and for all weapons firing is BLACKSMITH. "Running password for returning patrols and OPs is MOOSEBREATH followed by the number of soldiers returning. "The time is now 0912. What are your questions?"

Figure 2-2. Example operation order (continued).

(a) As it passes through the assault position, the platoon deploys into its assault formation; that is, its squads and fire teams deploy to place the bulk of their firepower to the front as they assault the objective. A platoon sometimes must halt to complete its deployment and to ensure synchronization so that all squads assault at the designated time.

NOTE: Platoons should avoid halting in the assault position, because it is dangerous and may cause the loss of momentum.

(b) The assaulting squads move from the assault position and onto the objective. The platoon must be prepared to breach the enemy's protective obstacles.

(c) As the platoon moves beyond the obstacle, supporting fires should begin lifting and shifting away from the objective. Both direct and indirect fires shift to suppress areas adjacent to the objective, to destroy enemy forces retreating, or to prevent enemy reinforcement oft he objective.

c. **Assaulting the Objective.** As the platoon or its assault element moves onto the objective, it must increase the volume and accuracy of fires. Squad leaders assign specific targets or objectives for their fire teams. Only when these discreet fires keep the enemy suppressed can the rest of the unit maneuver. As the assault element gets closer to the enemy, there is more emphasis on suppression and lesson maneuver. Ultimately, all but one fire team may be suppressing to allow that one fire team to break in to the enemy position. Throughout the assault, soldiers use proper individual movement techniques, and fire teams retain their basic shallow wedge formation. The platoon does not get "on-line" to sweep across the objective.

d. **Consolidation and Reorganization.** Once enemy resistance on the objective has ceased, the platoon must quickly take steps to consolidate and prepare to defend against a counterattack.

(1) ***Consolidation techniques.*** Platoons use either the clock technique or the terrain feature technique in consolidating on the objective.

NOTE: All-round security is critical. The enemy might counterattack from any direction. The platoon leader must evaluate the terrain thoroughly.

(a) *Clock technique.* In using this method, the platoon leader designates either a compass direction or the direction of attack as 12 o'clock. He then uses clock positions to identify the left and right boundaries for squads. The platoon leader positions key weapons along the most likely avenue of approach based on his assessment of the terrain. (See Figure 2-34.)

- Reinforce other parts of the company.
- Counterattack locally to retake lost fighting positions.
- Withdraw from an untenable position using fire and movement to break contact. (The platoon leader does not move his platoon out of position if it will destroy the integrity of the company defense. All movements and actions to reposition squads and platoons must be thoroughly rehearsed.)

NOTE: In any movement out of a defensive position, the platoon MUST employ all direct and indirect fire means available to suppress the enemy long enough for the unit to move.

g. **Consolidate and Reorganize.**

(1) The platoon—

- Reestablishes security.
- Remans key weapons.
- Provides first aid and prepares wounded soldiers for MEDEVAC.
- Repairs damaged obstacles and replaces mines (Claymore) and booby traps.
- Redistributes ammunition and supplies.
- Relocates selected weapons to alternate positions if leaders believe that the enemy may have pinpointed them during the attack. Adjusts other positions to maintain mutual support.
- Reestablishes communications.
- Reoccupies and repairs positions, and prepares for renewed enemy attack.

(2) Squad and team leaders provide ammunition, casualty, and equipment (ACE) reports to the platoon leader.

(3) The platoon leader—

- Reestablishes the platoon chain of command.
- Consolidates squad ACE and provides ACE report to the company commander.

(4) The platoon sergeant coordinates for resupply and supervises the execution of the casualty and EPW evacuation plan.

(5) The platoon continues to improve positions. The platoon quickly reestablishes OPs and resumes patrolling as directed.

machine guns and antiarmor weapons. They are also positioned to cover obstacles, provide security, cover gaps between units, or provide observation.

2-19. RANGE CARDS

A range card is a record of the tiring data required to engage predetermined targets within a sector of fire during good and limited visibility. Every direct-fire weapon gunner must prepare a range card (DA Form 5517-R, Standard Range Card). Two copies of the range card are prepared. One copy stays at the position and the other is sent to platoon headquarters. Range cards are prepared for primary, alternate, and supplementary poisitions. Range cards are prepared immediately up arrival in a position, regardless of the length of stay, and updated as necessary. The range card is prepared in accordance with the FM for the specific weapon. The range card has two sections-a sector sketch section and a data section. A blank form for local reporduction on 8 1/2- by 11-inch paper is at the back of this manual General preparation instructions are as follows See Figure 2-40 for examples of completed DA Form 5517-R for a machine gun and Dragon.

a. The marginal information at the top of the card is listed as follows.

(1) SQD, PLT CO. The squad, platoon, and company designations are listed. Units higher than company are not listed.

(2) MAGNETIC NORTH. The range card is oriented with the terrain and the direction of magnetic north arrow is drawn.

b. The gunner's sector of fire is drawn in the sector sketch section. It is not drawn to scale, but the data referring to the targets must be accurate.

(1) The weapon symbol is drawn in the center of the small circle.

(2) Left and right limits are drawn from the position. A circled “L” and “R” are placed at the end of the appropriate limit lines.

(3) The value of each circle is determined by using a terrain feature farthest from the position that is within the weapon’s capability. The distance to the terrain is determined and rounded off to the next even hundredth, if necessary. The maximum number of circles that will divide evenly into the distance is determined and divided. The result is the value for each circle. The terrain feature is then drawn on the appropriate circle.

(4) All TRPs and reference points are drawn in the sector. They are numbered consecutively and circled.

(5) Dead space is drawn in the sector.

(6) A maximum engagement line is drawn on range cards for antiarmor weapons.

(7) The weapon reference point is numbered last. The location is given a six-digit grid coordinate. When there is no terrain feature to be designated, the location is shown as an eight-digit grid coordinate.

cover additional enemy avenues of approach and to protect the flanks and rear of the platoon position.

2-21. SQUAD POSITIONS

As a guideline, a squad can physically occupy a front of about 100 meters. From this position, it can defend 200 to 250 meters of frontage. The frontage distance between two-man fighting positions should be about 20 meters (allowing for a "lazy W" configuration on the ground; this would put fighting positions about 25 meters apart physically). Every position should be observed and supported by the fires of at least two other positions. One-man fighting positions may be located closer together to occupy the same platoon frontage. The distance between fighting positions depends on the leader's analysis of the factors of METT-T. In determining the best distance between fighting positions, the squad leader must consider—

- The requirement to cover the squad's assigned sector by fire.
- The need for security; that is, prevent infiltrations of the squad position.
- The requirement to prevent the enemy from using hand grenades effectively to assault adjacent positions, should he gain a fighting position.

2-22. PLATOON POSITIONS

The platoon leader assigns primary positions and sectors of fire to his machine guns and antiarmor weapons. He must personally check the lay of each weapon. He assigns primary positions and sectors of fire to his squads. The squad leader normally assigns the alternate positions for the squad and has them approved by the platoon leader. Each squad's sector must cover its own sector of fire and overlap into that of the adjacent squad. Flank squad sectors should overlap those of adjacent platoons. The platoon leader also assigns supplementary positions if required. The platoon leader may choose to position his squads in depth to gain or enhance mutual support.

2-23. SECTOR SKETCHES

Leaders prepare sector sketches based on their defensive plan. They use the range card for each crew-served weapon (prepared by the gunners).

a. **Squad Sector Sketch.** Each squad leader prepares a sector sketch to help him plan his defense and to help him control fire (Figure 2-42). The squad leader prepares two copies of the sector sketch. He gives one copy to the platoon leader and keeps the second copy at his position. The SOP should state how soon after occupying

the position the leader must forward the sketch. The sketch shows the following:

- Squad and platoon identification.
- Date/time group.
- Magnetic north.
- The main terrain features in his sector of fire and the ranges to them.
- Each primary fighting position.
- Alternate and supplementary positions.
- The primary and secondary sectors of fire of each position.
- Maximum engagement line.
- Machine gun FPLs or PDF.
- Dragon positions with sectors of fire.
- The type of weapon in each position.
- Observation posts and the squad leader's position.
- Dead space to include coverage by grenade launchers.
- Location of NVDs.
- Obstacles, mines, and booby traps.

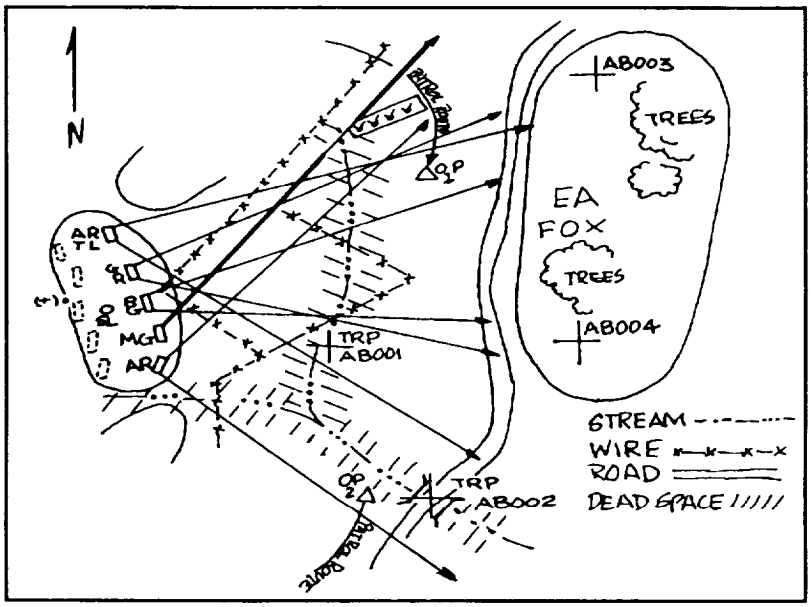


Figure 2-42. Squad sector sketch.

b. **Platoon Sector Sketch.** The platoon leader check range cards and squad sector sketches If he finds gaps or other flaws in his fire plan, he adjusts the weapons or sectors as needed. If he finds any dead space, he takes steps 10 cover it with mines, grenade launcher fire, or indirect fire. He then makes two copies of his platoon sector sketch (one for his use; the other for the company commander) (Figure 2-43). His sketch shows the following:

- Squad sectors of fire.
- Machine gun and antiarmor weapon positions and their sectors of fires, to include FPLs and PDFs of the automatic rifles/machine guns and TRPs for the antiarmor weapons.
- Maximum engagement lines for antiarmor weapons.
- Mines (Claymores) and obstacles.
- Indirect fire planned in the platoon's sector of fire (targets and FPF).
- OPs and patrol routes, if any.
- Platoon CP
- Platton/company identification.
- Dote/time group.
- Magnetic north.
- location of casualty collection point.
- Location of NVDs/thermal sights that are part of the limited visibility security plan.
- Adjustments during limited visibility to maintain coverage of assigned TRPs.

2-24. FIRE CONTROL MEASURES

Normally, antiarmor fires (except LAWs) are part of the battalion or company fire plan. One leader controls all antiarmor weapons firing from a single position or into a single engagement area. Platoon leaders normally control the fires of machine guns. Squad leaders and team leaders control, automatic rifles, grenade launchers, and rifle tire. Platoon and squad leaders use the following fire control measures to ensure the proper concentration and distribution of fires.

a. **Sectors.** Leaders usc sectors of fire to assign responsibility and ensure distribution of fires across the platoon and squad front. Sectors should always overlap with adjacent sectors.

b. **Engagement Areas.** Leaders use engagement areas to concentrate all available fires into an area where they intend to kill the enemy. When conducting ambushes, units refer to the engagement areas as a KILL ZONE.

factors of METT-T and on his and the higher commander's intent. The platoon's normal priority of work is—

- Ž Establish local security
- Ž Position antiarmor weapons, machine guns, and squads and assign sectors of fire.
- Ž Position other assets attached to the platoon.
- Ž Establish the CP and wire communications.
- Ž Designate FPLs and FPFs.
- Ž Clear fields of fire and prepare range cards and sector sketches.
- Ž Coordinate with adjacent units—left, right, forward, and to the rear.
- Ž Prepare primary fighting positions.
- Ž Emplace obstacles and mines.
- Ž Mark or improve marking for TRPs and other fire control measures.
- Ž Improve primary fighting positions such as overhead cover.
- Ž Prepare alternate positions, then supplementary positions.
- Ž Establish a sleep and rest plan.
- Ž Reconnoiter routes.
- Ž Rehearse engagments, disengagements, and any counterattack plans.
- Ž Adjust positions or control measures as required.
- Ž Stockpile ammunition, food, and water.
- Ž Dig trenches to connect positions.
- Ž Continue to improve positions.

2-26. COORDINATION

Coordination between adjacent platoons/squads is normally from left to right and from front to rear. Information exchanged includes the following:

- Ž Location(s) of leaders.
- Ž Location of primary, alternate, and supplementary positions and sectors of fire of machine guns, antiarmor weapons, and subunits.
- Ž Route to alternate and supplementary positions.
- Ž Location of dead space between platoons and squads and how to cover it.
- Ž Location of OPs and withdrawal routes back to the platoon's or squad's position.
- Ž Location and types of obstacles and how to cover them
- Ž Patrols to be conducted to include their size, type, limes of departure and return, and routes.

APPENDIX 1 (ASSEMBLY AREA PROCEDURES)
to
ANNEX C (OPERATIONS)
to
INFANTRY PLATOON TACTICAL SOP

When directed to occupy an assembly area, the platoon leader designates a quartering party. Each squad will provide two men for the quartering party. The platoon sergeant or selected NCO will be in charge of the quartering party.

1. The quartering party reconnoiters the assembly area to ensure no enemy are present and to establish initial security.

2. The quartering party determines initial positions for all platoon elements.

3. The quartering party provides security by forcing enemy reconnaissance probes to withdraw and providing early warning of an enemy attack.

4. As the platoon clears the release point, quartering party members, waiting in covered and concealed positions, move out and guide the platoon to its initial position without halting.

5. The platoon establishes and maintains local security. The platoon leader assigns each squad a sector of the perimeter to ensure mutual support and to cover all gaps by observation and fire. The platoon leader designates OPs and squad leaders select OP personnel. OPs have communications with the platoon CP. OPs warn the platoon of enemy approach before the platoon is attacked.

6. The platoon leader establishes a priority of work, to include–

a. Positioning of crew-served weapons, chcmieal-agent alarms, and designating PDF, FPL, and FPFs.

b. Constructing individual and crew-served fighting positions.

c. Setting up wire communications between the squads and the platoon CP. (Radio silence is observed by the platoon.)

d. Preparing range cards.

e. Camouflaging positions.

f. Clearing fields of fire.

g. Distributing ammunition, rations, water, supplies, and special equipment.

h. Conducting preventative maintenance checks and services on weapons and equipment.

i. Preparing Dragon nightsight.

j. Inspection platoon members and equipment.
k. Rehearsing critical aspects of the upcoming mission.
l. Test firing small-arms weapons (if the tactical situation permits).
m. Conducting personal hygiene and field sanitation.
n. Instituting a rest plan.
o. Completing the Work priorities as time permits.

7. The platoon leader conducts adjacent unit coordination. The platoon leader assigns security patrols, if applicable. The platoon leader establishes responsibility for overlapping enemy avenues of approach between adjacent squads and platoons. The leaders ensure there are no gaps between elements. The platoon leader exchanges information on OP locations and signals. The platoon leader coordinates local counterattacks.

8. The platoon leader forwards a copy of the sector sketch to the company.

Student Handout 5

This student handout contains extracts from FM 21-18, Chapters 3 and 4.

CHAPTER 3

Movement Planning for FOOT MARCHES

The success of the march depends upon thorough planning that must consider the mission, tactical situation, terrain, weather, and participating units. A successful march requires the unit to adhere to prescribed routes and time schedules, to effectively employ all available means of transportation, and to execute assign tasks immediately upon arrival at the destination. Movement planning culminates in the preparation and issuance of a standard operation order with required annexes—written movement orders are rarely prepared at company level.

This chapter implements STANAG 2154 (Edition Five).

3-1. PLANNING

March planning is based on that planning conducted at battalion level and may be organized IAW with the following sequence.

a. **Receive the Mission.** The unit receives the mission to conduct a road march. The planning process begins with the commander and staff conducting a hasty mission analysis to determine critical times and tasks to accomplish.

b. **Preparation and Issuance of the Warning Order.** To allow subordinate units the required time to prepare for a pending move, a warning order is issued, which contains all available information about the march. The planning time available determines the time of issuance and the content of the warning order.

c. **Estimate of the Situation.** In the operation estimate, the S3 considers the mission, weather, terrain, time and space factors, available routes, available transportation, enemy capabilities, disposition of own forces, physical condition and training of troops, and courses of action available. The S3 then recommends to the commander which course of action to accept. Based upon the commander's decision, the staff then prepares the movement order. *(See FM 101-5-1 for a detailed discussion of the estimate of the situation.)*

d. **Development of Detailed Movement Plans.** After the commander has selected a course of action, an OPORD is prepared. In developing these plans, the commander or staff must consider the following.

(1) *Column organization*. To facilitate control and scheduling, units are organized into serials and march units, and are given an order of march.

(a) A march unit is a unit of command that moves and halts at the command of a single commander. The march unit normally corresponds to one of the smaller troop units such as a squad, section, platoon, or company.

(b) A march serial (referred to as a serial) consists of one or more march units that are organized under the senior officer and are given a specific numerical or alphabetical designation to facilitate control. The march units of the serial normally possess the same march characteristics. A serial is usually a battalion or larger unit but can be a company if marching alone.

(c) A march column (referred to as a column) consists of elements of a command that are moving over the same route and can consist of one or more serial. A column commander is

designated to facilitate control. A column is normally a brigade or larger unit but can be a battalion if marching alone.

(2) *Order of march.* In a tactical march, the order of march depends on the mission, terrain, probable order of commitment into action, and mobility of units. March units and serials are placed in the desired order of march by scheduling the arrival of march units at the start point.

(a) If tanks and infantry units are included in the march, they are interspersed throughout the column to facilitate integrated entry into combat.

(b) Artillery and mortars are placed forward and throughout the column to ensure the support of the security forces and the initial action of the main body.

(c) Air defense weapons are deployed throughout the column or are moved by bounds to protect passage of critical points.

(d) Engineer units are located well forward to facilitate the movement of the force through obstacles along the march route.

(e) Antitank weapons can be disposed to provide protection throughout the column. Some antitank weapons may be employed in support of security forces.

The integration of these and other combat, combat support, and combat service support assets may have an adverse impact on the movement of forces.

(3) *March formations.* The formation for foot marches varies depending on the routes available and the enemy situation. The usual formation for tactical marches is a column of two files with one file on each side of the road or in single file. The column commander designates the side of the road on which the troops are to march, or whether both sides of the road are to be used. Based on the enemy ground threat, the column forms into a route column, tactical column, or approach march.

(a) Route column. A route column is enforced when the likelihood of ground contact with the enemy is remote.

Administrative considerations govern movement; therefore, units are grouped administratively for ease of movement and control. Commanders normally move at the head of their units. This formation is sometimes called an *administrative column.*

(b) Tactical column. A tactical column is enforced when ground contact is possible. Units are grouped tactically to permit prompt adoption of combat formations. Movement is usually conducted over roads or trails and by the fastest means available. March units establish local security to the flanks. Dispersion depends on the enemy situation.

(c) Approach march. An approach march is enforced when ground contact with the enemy is imminent. Tactical considerations govern; therefore, elements whose contact with the enemy is likely adopt suitable combat formations. The commander's main concerns are to quickly bring superior combat power to bear against the enemy and to protect his force against surprise. The column establishes guards to the front, flanks, and rear, but larger forces should establish a covering force to ensure unimpeded movement.

(4) *March computations.* Based on the strength, formation, and rate of march, march unit pass time is computed. The pass time of the marching columns, plus necessary time-distance computations, is used to determine the completion time of the march.

(5) *Road movement table draft.* Using the march computations, a draft of the road movement table is completed.

(6) *Command and control.* The commander establishes initial control of the march by designating control measures in his road movement order. Examples of control measures are:

- Start point and release point.
- Other critical points along the march route (checkpoints, passage points, and so on).
- Time at which the head or tail of the column is to pass the SP and critical points.

- Rate of march.
- Order of march.
- Assembly or bivouac areas.
- Location of command post.
- Communications for use during the march.

The commander provides for advance and quartering parties, guides, route marking, and traffic control. Army aviation and military police units are particularly suitable for traffic control.

(7) *Plan check.* Using the draft road movement table and a road movement graph, the movement plan is checked to ensure that it conforms to the directive of the higher headquarters and the battalion commander's instructions.

(8) *Tactical situation.* The march order should also contain a statement of enemy situation, weather, and visibility conditions, and if applicable:

- Road restrictions.
- Information obtained from route reconnaissance.
- Actions on enemy contact (ground and air).
- Actions at halts and for disabled vehicles.
- Actions in the assembly area.
- Procedures for resupply, maintenance, and feeding.
- Location of leaders.
- A communications plan.

Most of the information should be part of the unit's SOP; therefore, only exceptions to the SOP should be stated in the OPORD.

e. **Issuance of Road Movement Orders.** The march order is prepared either as an OPORD or as an annex to an OPORD. (An example of a road movement order is contained in Appendix D.) The OPORD is either written or issued orally, and is accompanied by a road movement table, operation overlay, or strip map.

(1) A road movement table, prepared as an annex to an OPORD, provides serial commanders with arrival and clearance

times at checkpoints along the route of march. It provides the column commander with information as to the proposed location of elements of the column at various times.

(2) An operation overlay shows the location and strength of friendly forces involved in an operation and should show the present location of units, route of march, critical points, and the new location of units at the destination.

(3) A strip map is a schematic diagram of the route of march, and shows landmarks and checkpoints with the distances between them. It can be issued as an annex to the road movement order and in addition to or in lieu of an overlay.

(4) An administrative order or annex can be cited or included in the OPORD when the administrative details are too long for inclusion in the body of the order.

f. **Organization and Dispatch of a Reconnaissance Party.** Each march plan is based on a thorough ground reconnaissance, time permitting. Map reconnaissance and aerial reconnaissance help formulate a plan but are not substitutes for ground reconnaissance. A reconnaissance party performs the route reconnaissance and usually consists of a reconnaissance element, engineer element from an attached or supporting engineer unit, and traffic control element. When the situation dictates, NBC survey teams may be included in the reconnaissance party. The unit SOP establishes the composition of the reconnaissance party, which can be modified to meet the requirements of a specific march. The information required by the S3 from the reconnaissance party includes:

(1) Available routes and conditions (routes may be specified by higher headquarters).

(2) Recommended rate of march.

(3) SP and RP selections or confirmation of their suitability, which was selected by map reconnaissance.

(4) Confirmation of the assembly or bivouac area location.

(5) Checkpoint locations on the route.

(6) Distance between checkpoints on the route and total distance from SP to RP.

(7) Location of obstacles and estimation of soldiers and equipment needed to repair and maintain routes.

(8) Number of guides required and their route location.

g. **Organization and Dispatch of a Quartering Party.** Quartering party members prepare anew area for the systematic arrival of units.

(1) A battalion quartering party consists of a quartering party commander (usually the HHC commander); an S4 representative; company representatives to include supply and NBC personnel; and communication, security, and medical personnel.

(2) The quartering party commander indicates the location of major subordinate units on the ground, formulates a plan to receive and guide units from the RP to their areas, and selects exact locations for the battalion command and administrative installations based on the general location of these areas selected by the S3.

(3) Company representatives select locations for company headquarters, platoons, feeding areas (kitchen areas, if mess is under company control), and latrines.

(4) Communications personnel install equipment that will ensure immediate control of units as units arrive in their assigned areas.

(5) Medical personnel advise other quartering party personnel on sanitation measures and select a site for the aid station.

(6) Based on the order of march, a plan is prepared to guide each unit over a designated route. This route begins at the RP and extends to the unit's new area. Guides must understand and must rehearse the plan. This prevents congestion or delay near the RP. The actual dispatch of the quartering party can follow the issuance of the movement order.

CHAPTER 4

Execution of FOOT MARCHES

The execution phase of foot marches is a continuation of the planning phase. The troop-leading procedure provides a framework for feedback to the unit commander or leader. Proper planning ensures a smooth transition by setting up proper task organization, security measures, and a flexable command and control system. Also, the successful execution is enhanced by being able to adapt the plan to changing situations.

Section I
CONDUCT OF THE MARCH

Proper execution of the march depends upon establishment of an effective organization and security measures, standardized communication means, and contingencies for reaction to enemy contact. These ensure the foot march is flexible to changing conditions and responsible to the needs of the commander.

4-1. ORGANIZATION FOR THE MARCH

Execution depends upon the establishment of the proper organization and the accomplishment of critical tasks. These ensure flexibility to changing conditions and responsiveness to the needs of the commander. A command is organized into

march units and further divided into march serials or march columns (Figure 4-1).

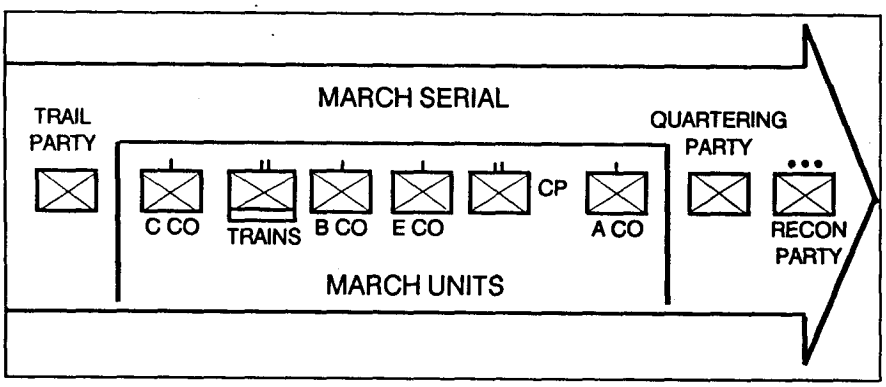


Figure 4-1. March Organizations.

a. **Reconnaissance Party.**

(1) The reconnaissance party reconnoiters the route to determine travel time, capacity of underpasses and bridges, and locations of culverts, ferries, and fords; and to identify critical points and obstacles. Route reconnaissance can be conducted to confirm and supplement data from map studies, higher headquarters, and air reconnaissance. The amount of detail is often related to speed of movement.

(2) Instructions to the party should state the type and extent of information required, and the time and place the report is to be submitted.

b. **Main Body.**

(1) Before starting a march, each march unit of a serial reconnoiters its route to the SP and determines the exact time for reaching it. The movement order states the time that the serial must arrive and clear its SP. The serial commander then determines and announces the times for march units of his serial.

(2) Arrival time at the SP is critical. Each march unit must arrive at and clear the SP on time, otherwise movement of other elements may be delayed. Each leader reconnoiters the route

from his position to the SP to help him decide when his unit must move to meet its SP time.

(3) During the movement, march units move at the constant speed designated in the order, maintaining proper vehicle/foot interval and column gap. Erratic increases and decreases in speed, particularly at hills, create an accordion or whipping effect. This could force tail elements to move at increased and unsafe speeds to keep up with the head of the column. If the march unit is behind schedule, it uses only the designated catch-up speed. March units report crossing each control point as directed by the march order. During the move, air and ground security must be maintained.

c. **Trail Party.**

(1) The trail party is the last march unit in a battalion serial. It is usually led by the BMO and consists of elements of the maintenance platoon and medical personnel. The trail party recovers disabled vehicles and stragglers. If a disabled vehicle cannot be repaired or towed, the vehicle and crewmembers are moved off the road into a secure area. The drivers/crewmembers are left with the vehicle, along with food and water. When a vehicle(s) is left behind, the BMO calls in the location and tells the battalion S4 why it was left.

(2) Medical personnel attached to the trail party compose the personnel evacuation section. This section is responsible for recovering stragglers from the march column that require medical care. Company medical aidmen try to maintain march unit discipline by treating casualties within their ability, but they must not allow stragglers to delay them or the progress of the foot march. The trail party's personnel evacuation section must have troop-carrying assets to pickup and treat stragglers from the various march units within the battalion serial. Once the trail party picks up a straggler, the S1 should be notified to maintain accountability.

(3) When the trail party completes the road march, the battalion's first priority is to recover vehicles left behind and to return stragglers to parent units. A tactical road march is not complete until all march units, vehicles, and personnel are accounted for.

4-2. SECURITY

During the march, the companies maintain security through observation, weapon orientation, dispersion, and camouflage. Commanders assign sectors of observation to their troops so that there is 360-degree observation. Main weapons throughout the column are oriented on specific sectors. The first elements cover the front, following elements cover alternate flanks, and the last element covers the rear.

a. Planning for and implementing air defense security measures are imperative to reduce the battalion's vulnerability to enemy air attack. The battalion commander must be able to integrate into his fire plan the ADA assets allocated to him. Furthermore, he must ensure that all passive and active air defense measures that could be implemented at company level are well planned and used.

(1) *Passive measures* include the use of concealed routes and assembly areas, movement on secure routes, night marches, increased intervals between elements of the columns, and dispersion when under attack.

(2) *Active measures* include the use of organic and attached weapons in accordance with the unit air defense plan during marches.

NOTE: Each vehicle in a motor march has an air guard to provide air security. Specific vehicles may be designated as air guard vehicles performing air rather than ground observation.

b. Scheduled halts preplanned along the march route for maintenance and rest, or to follow higher-echelon movement orders. They should be located on defensible, covered, and concealed terrain. During scheduled halts, vehicles/soldiers pull to the side of the road while maintaining march dispersion. Local security, to include at least one OP for each platoon, is immediately established, and drivers perform during-operation maintenance checks. OPs should not be established outside the range of small arms and should be readily retrievable so that the unit is ready to move at a moment's notice.

c. Unscheduled halts and actions may be caused by unforeseen developments such as obstacles, traffic congestion, or equipment failure. If a halt is necessary, the march column's first priority is to establish security and to have each unit form a hasty perimeter.

d. Obstacles that are reported by the reconnaissance party should be bypassed, if possible. If they cannot be bypassed, the lead march unit assumes a hasty defense to cover and overwatch while engineers remove the obstacle. As the lead march unit removes the obstacle, the other march units move slower or move off the road to closely monitor the battalion command net.

4-3. REACTION TO ENEMY CONTACT

If the battalion is attacked by indirect fire during the road march, the unit in contact continues to move. The remainder of the battalion attempts to bypass the impact area (Figure 4-2).

a. If the battalion is attacked by hostile aircraft during the march, the march unit that is attacked assumes a quick defensive posture or perimeter (whichever is best for the terrain) and immediately engages the attacking aircraft with all available weapons. The rest of the battalion moves to covered and concealed areas.

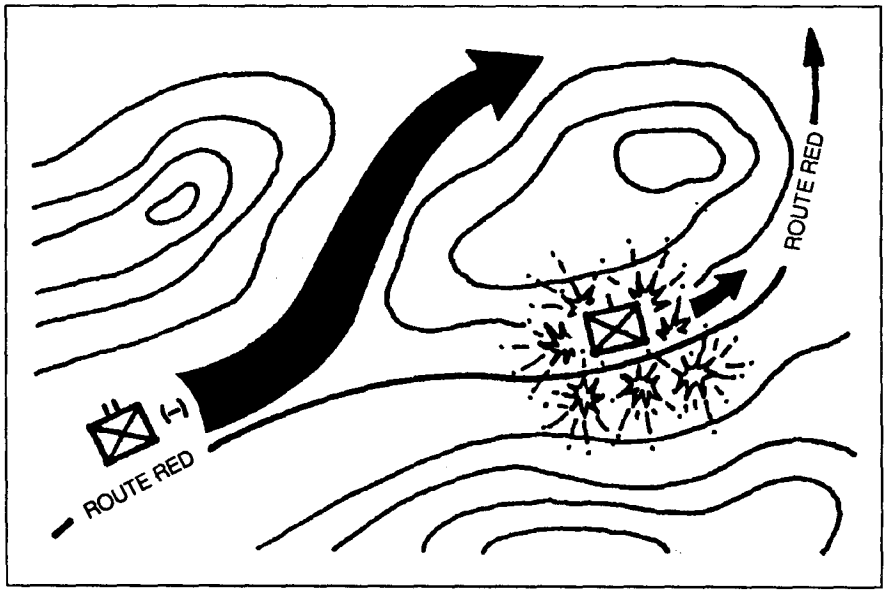


Figure 4-2. Battalion actions under indirect fire.

b. Ambushes are fought through without delay. If the battalion is ambushed, the march unit in the kill zone increases speed, fights through, and reports the ambush. The battalion commander may order a march unit already beyond the kill zone to return to the ambush site (Figure 4-3). The march unit conducts a hasty attack to clear it of enemy or establishes a blocking position on the far side of the kill zone while a following march unit conducts the hasty attack. Follow-on march units may also be ordered to aid in extracting the ambushed march unit from the kill zone either through assault by fire or by direct assault on the ambush position.

c. Disabled vehicles must not obstruct traffic. They are moved off the road, and their status is reported immediately. Security is established and guides are posted to direct traffic. If the operator repairs the vehicle, the vehicle rejoins the rear of the column. If the operator cannot repair the vehicle, trail party maintenance elements pick it up.

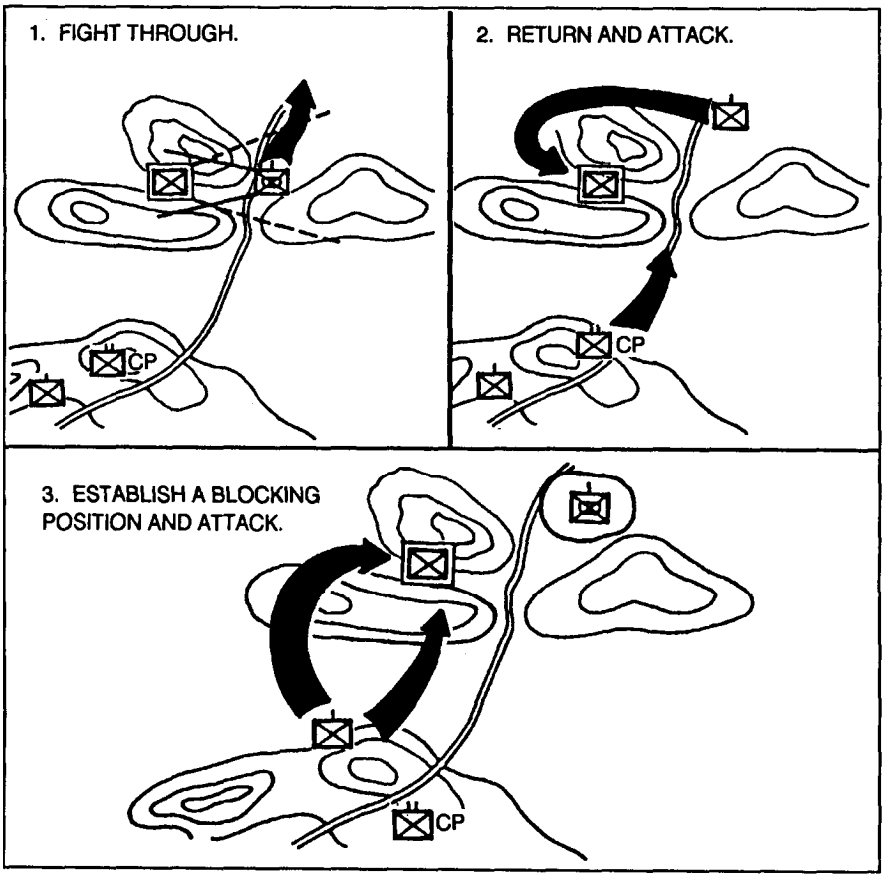


Figure 4-3. Actions on the ambush site.

4-4. COMMUNICATIONS

Messengers are the primary means of communication during tactical marches, but visual signals and road guides can also be used. Since the enemy has good direction-finding equipment, radio is used only in emergencies and when no other means of communication can be used.

a. Road guides can also be used to pass messages from one march unit to a following march unit. Because of the need to stay off the radio, road guides are needed to control the speed of

march units and their intervals. When used, they should be given enough information to control movement. The amount of information given depends upon the friendly and enemy situation.

b. The information that messengers or road guides can give to other passing units includes:

- A strip map update.
- The number, sequence, identification, and composition of march units.
- Expected arrival time and clearance time for march units passing the positions of the guides.
- Recognition signals.
- How guides are to be positioned, who will pick them up, and when.
- Instructions for linking up with the parent unit upon completion of road guide duties.
- Special instructions for the guides to pass on to march unit commanders to include details of the route and any changes.

c. Visual communication means include flashlights, lanterns, luminous markers, panel sets, flags, pyrotechnics, smoke, and arm-and-hand signals. The use and meaning of visual signals are standardized to avoid misunderstandings. The road movement order contains instructions for use in specific situations.

d. Sound communications include voice, whistles, horns, and gongs, which can be used to assemble troops upon completion of halts or to warn troops of an enemy air or chemical attack. Sound signals normally are standardized and can be included in the unit SOP if their use is routine.

4-5. HALTS

During a march, halts are enforced routinely to rest personnel and adjust equipment. They are regulated by SOP or by the road

movement order. Unit commanders are promptly notified of the time and approximate length of unscheduled halts.

a. Day marches should end early to provide troops with rest and time to prepare for the next day's activities. Midday heat or enemy action can require the unit to make long daylight halts or night marches. At long halts, each unit moves to a planned location near the route of march.

b. Under normal conditions, a 15-minute halt provides rest for soldiers after the first 45 minutes of marching. Following the first halt, a 10-minute halt is enforced for every 50 minutes of marching. Variations of time schedules are required if a halt time occurs when passing through a built-up area, or when cover and concealment are required but not available. On extended or long marches, variations in the time schedule should be kept to a minimum. Units establish observation posts and patrols for security during halts.

c. All units in the column should be halted at the same time. At the halt signal, troops should move to the sides of the road while staying close to their unit. If the situation permits, soldiers should remove or loosen their gear and sit or lie down with their feet elevated for optimum relaxation. Commanders inspect soldiers and equipment during halts, and aidmen administer medical treatment if needed.

d. Soldiers who relieve themselves should dig individual cat-hole latrines and cover them immediately after use. They can dig straddle trenches during noon halts and while occupying bivouac or assembly areas.

4-6. ACCORDION EFFECT

An accordion effect in marching is caused by changes in the rate of march and most often occurs as lead elements of a unit ascend or descend terrain, or pass through critical points along the march route. A change in the rate of march increases as it passes down the column, so that the rear elements must either double

time to maintain the distance or be left far behind. Thus, a minor change of rate at the head of the column becomes magnified by the time it reaches the tail of the column. The best method for reducing the accordion effect is for lead elements to slow their rate of march after passing obstacles to permit rearward elements to maintain distances without running. The accordion effect can also be reduced by lengthening or shortening the step, or by taking up the slack to maintain the prescribed distance between soldiers.

4-7. DISTANCES BETWEEN UNITS

Terrain, weather, and the enemy situation influence distances between soldiers and units during a march. Distances should sustain march efficiency and reduce the effects of accordion action, which usually results when marching over hills or difficult terrain. Normal distances are usually included in the unit SOP as a guide to commanders.

a. **Distances Between Men.** When soldiers march on roads in the daytime, the distances between them vary from 2 to 5 meters to provide dispersion and space for marching comfort. A distance in excess of 5 meters increases the length of the column and hinders control. At nighttime, the distances should be reduced to 1 to 3 meters between soldiers to assist in maintaining contact and facilitating control. The tactical situation could require changes to these distances—for example, if the march route is within range of enemy artillery fire, the maximum distances should be used.

b. **Distances Between Units.** Normally, distances are 100 meters between companies and 50 meters between platoons. During reduced visibility, the distances can be decreased to 50 meters between companies and 25 meters between platoons to facilitate control. In the daytime or when the column is marching within the range of enemy artillery, the distances should be

increased IAW the situation and the amount of control required. These distances permit vehicles to pass the column.

4-8. NUCLEAR, BIOLOGICAL, CHEMICAL

The battalion commander must include in his plan road marches and assembly areas on the integrated battlefield. He must also consider chemical, biological, and nuclear attacks. These planning considerations should include: properly distributing NBC protective and decontamination materials and ensuring locations are known, establishing and maintaining proper MOPP level, and avoiding contaminated areas.

a. If a unit must cross a chemically contaminated area—

- Use MOPP4.
- Avoid moving through underbrush.
- Stay on hard-surface roads.
- Ensure soldiers are issued NAAK-MK 1 auto injectors.
- Cover as much equipment as possible.
- Avoid vehicle tracking (stagger vehicles in the column) to reduce secondary contamination from dust or debris created by vehicles.
- Avoid low areas.
- Avoid moving early or late in the day.
- Decrease speed to reduce dust or mud.
- Increase vehicle intervals.
- Scrape dirt-road surfaces with a dozer to clear the road of surface contamination.

b. If a unit must cross a nuclear contaminated area—

- Wear BDUs with sleeves rolled down and the top collar buttoned, along with a scarf or handkerchief over the nose and mouth.
- Avoid disturbing road dust.
- Ensure that the unit's radiac equipment is used by march units.

- Dampen hardtop roads before traveling.
- Dampen dirt roads to prevent disturbing contaminated dust.
- Use dosimeters throughout the march to measure the total dose soldiers receive.

c. Detailed planning for the decontamination of march units must be accomplished to reduce losses and excessive delays. Every effort should be made to avoid contaminated areas.

Section II
PERSONNEL DUTIES

This section discusses the minimum duties of individuals at the company level.

4-9. COMPANY COMMANDER

The company commander has a variety of duties before, during, and after the march.

a. **Before the March.** The company commander issues the warning order in time to allow the subordinate leaders and their soldiers to prepare for the march. He conducts reconnaissance of the route to the SP to determine the length of time it will take the company to arrive there from its present area. (If the company is marching alone, the commander selects the route of march and directs a reconnaissance.) Then he prepares a march plan and issues the road movement order. The order is based on the order received from battalion; however, if the company is marching alone, the order is prepared by the company. The order can include, but is not limited to, the following:

- Enemy situation.
- Friendly situation.
- Purpose of the march.
- Units participating.
- March objective.

- Order of march.
- Rate of march.
- Route of march.
- Start point and time.
- Release point.
- Instructions concerning march, water, light, and communication discipline.
- Formation time, based on time distance to start point.
- Uniform and equipment to include water and rations to be carried.
- Location of march collecting posts.
- Designation of personnel for straggler identification and control.
- Command and control.

NOTE: See Appendix B for an example of a battalion road movement order.

The company commander issues instructions concerning personnel who will not march with the unit but will either be left behind or transported to the destination. He supervises preparation for the march. He forms his company at the scheduled time and conducts an inspection to ensure that uniforms and equipment are as prescribed and are worn properly.

b. **During the March.** The company commander usually marches at the head of the company to the SP, after which he moves to a point in the column where he can effectively supervise the march. During the march, he supervises the rate of movement, company formation, appearance of troops, and adjustment of packs, weapons, and other equipment. The commander maintains control by using voice, messenger, and radio communications. Periodically, he checks the march rate and distances between soldiers and platoons to reduce the accordion effect (see paragraph 4-6). He checks the number and

condition of stragglers, and ensures that they have been accounted for by the chain of command.

c. **During Halts.** The company commander ensures foot inspections, water discipline, sanitation, safety, and adjustment of loads take place throughout the the company.

d. **After the March.** He ensures that movement of platoons into their respective assembly areas is rapid and without delay. He visits the platoon areas and supervises the platoon leaders in their inspections and execution of other duties.

4-10. COMPANY EXECUTIVE OFFICER

The company executive officer assists the company commander as directed. When the commander is not marching at the head of the column, the company executive officer leads the unit over the designated route at the prescribed rate of march. He supervises the pace setter, assists in supervision of the platoons during halts, and resumes the march according to the time schedule. He posts and supervises company traffic guards and guides. Upon completion of the march, he supervises the establishment of the company command post (CP) and latrine facilities.

4-11. COMPANY FIRST SERGEANT

The company first sergeant assists the commander as directed and ensures the unit NCOs perform all inspections in the conduct of the foot march. He helps establish and maintain march unit formation and discipline to include pace, intervals between soldiers, noise and light discipline, and water and rest discipline.

4-12. PLATOON LEADER

The platoon leader has a variety of duties before, during, and after the march.

a. **Before the March.** The platoon leader informs his platoon of information contained in the road movement order to ensure adequate and timely preparations. During the company formation, just before the march, the platoon leader inspects the wearing and adjustment of clothing and equipment. He supervises his squad leaders in the performance of their duties.

b. **During the March.** As the platoon marches to the SP, the platoon leader ensures that the prescribed distances within his platoon and between his and the platoon ahead are maintained. He checks compliance of the announced restrictions such as water and march discipline. After leading his platoon across the SP, the platoon leader moves to a point in the column where he can effectively control his unit. As the column approaches the RP, the platoon leader moves to the head of the platoon column to lead the platoon into the assembly area.

c. **At Halts.** During halts, the platoon leader directs soldiers to clear the road and to relax by sitting or lying down and by loosening their equipment. He checks the physical condition of his soldiers, and enforces water and food discipline and field sanitation measures. He supervises the formation of the platoon about one minute before the march so it will not be delayed.

d. **After the March.** Upon crossing the RP, the platoon leader ensures that the platoon moves promptly to its assigned area. In the assembly area, he disperses his unit and finds cover and concealment. He ensures that soldiers obtain food, water, shelter, and rest. In a tactical situation, the platoon leader ensures his soldiers are ready to accomplish their mission. He supervises his squad leaders in their duties, while he concentrates on foot inspections. He ensures medical attention where needed.

4-13. PLATOON SERGEANT

Platoon sergeants assist the platoon leader in the conduct of the foot march as directed. He supervises the inspection of soldiers

Student Handout 6

This student handout contains extracts from STP 21-24 SMCT.

Reorganize a Unit

071-430-0029

Conditions: Given a squad leader with squad, or platoon sergeant with platoon, or mortar section sergeant, or acting platoon leader defending as part of a larger unit; your element has just repelled an enemy assault.

Standards: Reorganized the unit (squad, platoon, or mortar section) in the defense following enemy contact.

Performance Steps

1. The platoon leader must plan the required reorganization of the platoon while defending (either deliberate or hasty). He must include his plan in the order to the squad leaders. The plan must be tentative and flexible and may be changed as the situation evolves. The leader's plan must be complete and detailed as possible.
2. Reorganize a unit:
    a. Reestablish the chain of command; fill all key positions from the remaining element members and ensure the new chain of command is disseminated down to the last member of your element.
    b. Evacuate the dead and seriously wounded according to your casualty evac plan; ensure all positions and sectors remain mutually supporting; check all sectors of fire after all casualties are evacuated to ensure all sectors are covered; If necessary, shift positions or reassign sectors to cover any gaps in your sector.
    c. Redistribute or resupply ammunition, weapons, and fuel; ensure the squad leaders pass out additional ammunition (if available), or divide the remainder equally throughout the squad or platoon; conduct a quick inventory and submit a supply request to higher if necessary.
    d. Ensure all enemy prisoners of war (EPWs), enemy material, and enemy information are collected, reported, and evacuated. (if possible)
    e. Ensure all crew-served weapons are manned and positioned on likely avenues of approach.
    f. Issue to higher, a LACE report to include:
        (1) L - Liquid, how much water each soldier has left (canteens per).
        (2) A - Ammunition, how much ammunition does the squad or platoon have per man (after redistribution).
        (3) C - Casualties, how many casualties did the squad or platoon encounter.
        (4) E - Equipment, how much special equipment does the squad and platoon have remaining.
3. For mortar section:
    a. Reestablish section communications.
    b. Reestablish the FDC

Evaluation Preparation: SETUP: Provide a squad or platoon in an established defensive position, simulated casualties, simulated EPWs, simulated destroyed crew-served weapons, blank ammunition, and a communication network.

BRIEF SOLDIERS: This task should be conducted and evaluated in a realistic field environment using a realistic combat scenario.

Performance Measures	**GO**	**NO GO**
1. Reestablished and disseminated the chain of command.	____	____
2. Evacuated the dead and seriously wounded.	____	____
3. Ensured all positions remained mutually supporting.	____	____

Performance Measures	GO	NO GO
4. Checked sectors of fire.	____	____
5. Redistributed or resupplied ammunition, weapons, and fuel if needed.	____	____
6. Ensured squad leaders and platoon sergeants passed out additional ammunition if available.	____	____
7. Ensured all EPWs were reported and evacuated ASAP.	____	____
8. Ensured all crew-served weapons are manned.	____	____
9. Issued a L-A-C-E report to higher.	____	____
10. Reestablished section communications (mortar section).	____	____
11. Reestablished the FDC (mortar section).	____	____

Evaluation Guidance: Score the soldier GO if all performance measures are passed. Score the soldier NO-GO if any performance measure is failed. If the soldier scores NO-GO, show the soldier what was done wrong and how to do it correctly.

References

Required	Related
FM 7-8	FM 23-90
	FM 7-10
	FM 7-7
	FM 7-7J

Conduct a Route Reconnaissance Mission

071-326-5805

Conditions: Given a platoon, a 1:50,000 map of the area of operation, and a mission to conduct a route reconnaissance.

Standards: Planned and conducted a route reconnaissance well enough to:
1. Organized the platoon to conduct the reconnaissance mission.
2. Used movement techniques appropriate for the likelihood of enemy contact.
3. Obtained necessary information concerning the conditions, obstacles, critical terrain features, and enemy along the assigned route.

Performance Steps

1. Planned the reconnaissance. Received the order.
    a. Issued a warning order
    b. Gathered information and prepared an operations order based on the factors of METT-T-C.
    c. Ensured the plan we as detailed as possible and included the exact information to be obtained, the time by which the information is to be reported, where the information is to be reported, where the information is to be sought, action to be taken upon enemy contact, and when the mission is to be executed. Essential details included:
        (1) Pertinent information on the enemy, friendly troops, and the area of operations.
        (2) Proposed plans of higher commands, to include anticipated traffic flow along the route and types of vehicles to be employed.
        (3) Pertinent information on the enemy, friendly troops, and the area of operations.
        (4) Proposed plans of higher commands, to include anticipated traffic flow along the route and types of vehicles to be employed.
        (5) When, where and how information is to be reported.
        (6) Time of departure.
        (7) Appropriate control measures.
        (8) Action to be taken when the mission is completed.
        (9) Special equipment requirements.
        (10) Terrain considerations: Existing routes and their physical characteristics
            (a) Gradients of slope and radii of curvature.
            (b) Bridges.
            (c) Vehicular fording, ferrying, and swimming sites.
            (d) Tunnels, under passes, and similar obstructions to traffic flow.
            (e) Artificial obstacles, such as areas of chemical, biological, and radiological contamination, roadblocks, craters, and minefields.
            (f) Rock falls and slide areas.
            (g) Drainage.
            (h) Other natural or manmade features, such as wooded and built-up areas, that may affect movement.

2. Supervised the preparation of the route reconnaissance. Ensured soldiers:.
    a. Maintained equipment to vehicles and weapons.
    b. Conducted Inspections.
    c. Conducted rehearsals.
    d. Issued the order
    e. Ensured rest plan was followed

3. Controlled the Route reconnaissance..
    a. Ensured reconnaissance commenced from the flanks or rear when no reconnoitering areas along the route that were likely to be defended by enemy detachments, such as bridge approaches, defiles, or buildup areas. Detailed observation preceded actual reconnaissance, and approach routes were checked for mines, booby traps, and signs of ambush.

Performance Steps

b. Ensured when time was available, dismounted personnel were sent forward first, covered by the remaining elements of the unit. The number of dismounted personnel sent forward depended on the size of objective and on available approaches, cover, and concealment. If the dismounted patrols found that the near edge of the area is clear, the remainder of the unit moved quickly forward. The dismounted patrols then continued the reconnaissance, over watched and followed closely by the remainder of the unit.
c. When conducting a mounted reconnaissance, part of the unit remained mounted and moved forward cautiously but rapidly, over watched by the remaining mounted elements. If the near edge of the area was clear, the over watching elements moved forward quickly and the advanced continued.

4. When conducting reconnaissance by fire the following procedures were followed.
   a. Reconnaissance by fire was accomplished by firing on likely or suspected enemy positions in an attempt to remove camouflage and to cause the enemy to disclose his presence by movement or return fire. During reconnaissance by fire, positions being reconnoitered were be observed continuously so that enemy activity can be quickly and definitely located.
   b. Reconnaissance by fire was employed by route reconnaissance teams as a security measure when time was critical and the loss of surprise was not essential.
   c. If the enemy returned the fire, the situation was further developed. If the fire was not returned, reconnaissance continued. Caution was exercised, to ensure the presence of a well-disciplined enemy was not overlooked.

Evaluation Preparation: SETUP: At the test site, provide all personnel, equipment, and material given in the task condition statement.

BRIEF SOLDIER: Tell the soldier that he is to plan and conduct a route reconnaissance using proper movement techniques for the likelihood of enemy contact, gather information about enemy forces along the assigned route, and critical terrain features.

Performance Measures	**GO**	**NO GO**
1. Planned reconnaissance based on the intelligence requirement.	____	____
2. Issued the plan for the mission.	____	____
3. Conducted hasty or deliberate reconnaissance based on time available and detail requirements.	____	____
4. Used reconnaissance by fire when permitted by the tactical situation.	____	____
5. Avoided decisive engagement with enemy forces.	____	____
6. Used proper movement techniques during the route reconnaissance.	____	____
7. Reported all items of military significance.	____	____

Evaluation Guidance: Score the soldier GO if all performance measures are passed. Score the soldier NO-GO if any performance measure is failed. If the soldier scores NO-GO, show the soldier what was done wrong and how to do it correctly.

References

Required	**Related**
FM 17-95	
FM 5-170	
FM 71-1	
FM 7-20	
FM 7-7	

Subject Area 24: Enemy Personnel

Supervise Handling of Enemy Personnel and Equipment at Squad Level
191-379-4450

Conditions: You are a squad leader in a field environment, given a squad of soldiers, Department of Defense (DD) Form 2745, and enemy prisoners of war (EPWs) with equipment and weapons.

Standards: Ensure that soldiers search, segregate, silence, speed, safeguard, and tag (5 Ss and T) EPWs according to Field Manual (FM) 3-19.40.

Performance Steps

1. Search captives.
    a. Thoroughly search each captive and confiscate any weapons, ammunition, military equipment, and items with intelligence value and record on DD Form 2745.

NOTE: Any weapons or ammunition that are impractical to retain should be destroyed in place after recording what the items were.

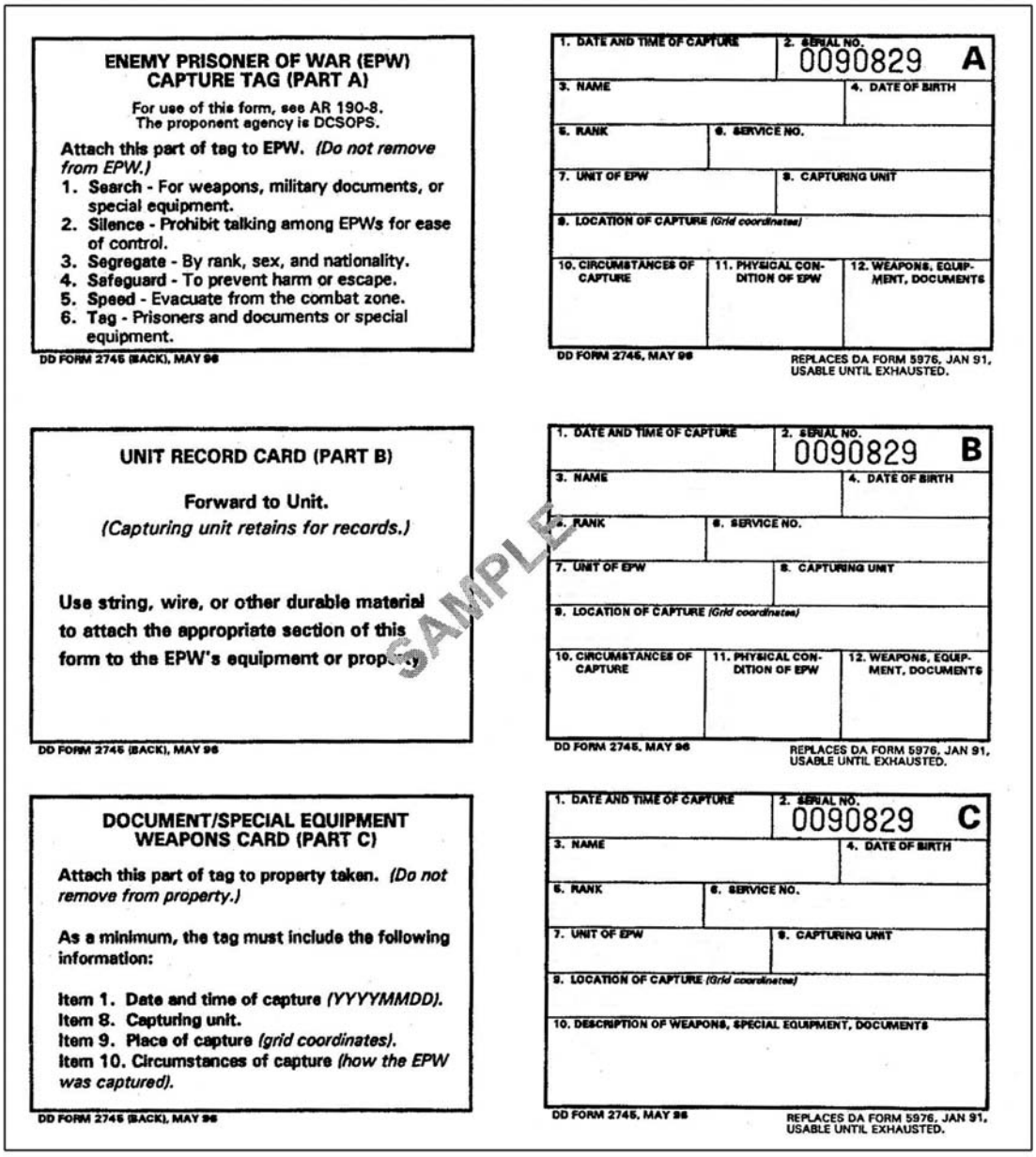
    b. Allow captives to keep personal property (except items that could be used as weapons or that could have intelligence value) of nominal or sentimental value, such as wedding rings. Personal property also includes chemical protective equipment (if in a chemical environment or a potential chemical environment), helmets, and identification cards. Allow the EPW/civilian internee (CI) to retain his own rations in the early stages of captivity.

NOTE: Conduct same gender searches when possible; however, this may not always be possible due to speed and security considerations. Therefore, mixed gender searches must be performed in a respectful manner using all possible measures to prevent any action that could be interpreted as sexual molestation or assault. The squad leader must carefully control soldiers doing mixed gender searches to prevent allegations of sexual misconduct. This does not mean the search will not be thorough, as the safety of you and your soldiers comes first.

2. Segregate captives.
    a. Segregate by rank (officers, noncommissioned officers [NCOs], or enlisted), sex (male and female), civilian and military and, when possible, nationalities and/or ideologies.
    b. Segregate captives who surrendered willingly or who deserted from those who resisted capture.
    c. Segregate captives who cannot be readily identified as belonging to one of the above listed groups.
    d. Segregate captives who do not provide the information needed in order to make a correct classification until their status can be determined.

3. Ensure that each captive has DD Form 2745.
    a. Ensure that the form contains the following:
        (1) Date and time of the capture.
        (2) Grid coordinates of the capture.
        (3) Capturing unit.
        (4) Circumstances of the capture.
    b. Use either DD Form 2745 or a locally produced three-part form. Figure 191-379-4450-1 shows what the form looks like. Instructions for the use of this form are on the back of it.
        (1) Place part A of the form on the captive and instruct him not to remove or alter it.
        (2) Place part C of the form on the bag or bundle of property taken from the captive.
        (3) Maintain part B of the form, as you are the capturing unit.

Performance Steps



ENEMY PRISONER OF WAR (EPW)
CAPTURE TAG (PART A)

For use of this form, see AR 190-8.
The proponent agency is DCSOPS.

Attach this part of tag to EPW. *(Do not remove from EPW.)*
1. Search - For weapons, military documents, or special equipment.
2. Silence - Prohibit talking among EPWs for ease of control.
3. Segregate - By rank, sex, and nationality.
4. Safeguard - To prevent harm or escape.
5. Speed - Evacuate from the combat zone.
6. Tag - Prisoners and documents or special equipment.

DD FORM 2745 (BACK), MAY 96

1. DATE AND TIME OF CAPTURE | 2. SERIAL NO. 0090829 A
3. NAME | 4. DATE OF BIRTH
5. RANK | 6. SERVICE NO.
7. UNIT OF EPW | 8. CAPTURING UNIT
9. LOCATION OF CAPTURE *(Grid coordinates)*
10. CIRCUMSTANCES OF CAPTURE | 11. PHYSICAL CONDITION OF EPW | 12. WEAPONS, EQUIPMENT, DOCUMENTS

DD FORM 2745, MAY 96 — REPLACES DA FORM 5976, JAN 91, USABLE UNTIL EXHAUSTED.

UNIT RECORD CARD (PART B)

Forward to Unit.
(Capturing unit retains for records.)

Use string, wire, or other durable material to attach the appropriate section of this form to the EPW's equipment or property.

DD FORM 2745 (BACK), MAY 96

SAMPLE

1. DATE AND TIME OF CAPTURE | 2. SERIAL NO. 0090829 B
3. NAME | 4. DATE OF BIRTH
5. RANK | 6. SERVICE NO.
7. UNIT OF EPW | 8. CAPTURING UNIT
9. LOCATION OF CAPTURE *(Grid coordinates)*
10. CIRCUMSTANCES OF CAPTURE | 11. PHYSICAL CONDITION OF EPW | 12. WEAPONS, EQUIPMENT, DOCUMENTS

DD FORM 2745, MAY 96 — REPLACES DA FORM 5976, JAN 91, USABLE UNTIL EXHAUSTED.

DOCUMENT/SPECIAL EQUIPMENT
WEAPONS CARD (PART C)

Attach this part of tag to property taken. *(Do not remove from property.)*

As a minimum, the tag must include the following information:

Item 1. Date and time of capture *(YYYYMMDD)*.
Item 8. Capturing unit.
Item 9. Place of capture *(grid coordinates)*.
Item 10. Circumstances of capture *(how the EPW was captured)*.

DD FORM 2745 (BACK), MAY 96

1. DATE AND TIME OF CAPTURE | 2. SERIAL NO. 0090829 C
3. NAME | 4. DATE OF BIRTH
5. RANK | 6. SERVICE NO.
7. UNIT OF EPW | 8. CAPTURING UNIT
9. LOCATION OF CAPTURE *(Grid coordinates)*
10. DESCRIPTION OF WEAPONS, SPECIAL EQUIPMENT, DOCUMENTS

DD FORM 2745, MAY 96 — REPLACES DA FORM 5976, JAN 91, USABLE UNTIL EXHAUSTED.

Figure 191-379-4450-1
Sample of DD Form 2745

4. Report the acquisition of captives through your chain of command.
5. Safeguard each captive until they are released to the military police (MP).
6. Evacuate captives to the rear and turn them over to the MP as soon as possible. Do not delay evacuation to obtain name, rank, service number, or date of birth.
   a. Ensure that you receive receipts from the MP for the captives being transferred to them.
   b. Give items taken from the captives (for security and/or intelligence reasons) to the MP, ensuring that each item is tagged by the MP to identify the owner.

Evaluation Preparation: Setup: Position soldiers to perform the mission. Have one or more soldiers to act as EPWs. Provide weapons and equipment for the role players.

Brief soldier: Tell the squad leader to instruct the soldiers on what they are to do and have the soldiers actually perform the steps necessary to complete the task. Tell the captive that he needs to follow instructions. Tell the soldiers acting as the squad not to continue to the next step until they are told to do so by the squad leader.

Performance Measures	GO	NO GO
1. Searched captives.	____	____
2. Segregated captives.	____	____
3. Ensured that each captive had DD Form 2745.	____	____
4. Reported the acquisition of captives through the chain of command.	____	____
5. Safeguarded each captive until they were released to the MP.	____	____
6. Evacuated captives to the rear and turned them over to the MP as soon as possible.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed (P). Score the soldier NO-GO if any step is failed (F). If the soldier fails any step, show him how to do it correctly.

References

Required	Related
AR 190-8	
DD FORM 2745	
FM 3-19.40	
STANAG 2044	

Subject Area 4: Survive [Combat Techniques]

Coordinate with an Adjacent Platoon
071-326-5775

Conditions: Given a platoon-sized element with two adjacent platoon-sized elements.

Standards: Coordinated with the adjacent platoon-sized elements for offensive and defensive operations; ensured mutually supporting positions, fires, and signals.

Performance Steps

1. Coordinate with Adjacent Elements. After receiving an order for an offensive or defensive operation and during your planning phase, you must consider coordination with adjacent elements. If you receive the order while all other platoon-sized element leaders are present, take that opportunity to coordinate as much as possible to avoid delays later in the operation. While many of the details that must be coordinated will vary with the situation, essential items must always be coordinated.
2. Coordinate in the Offense. In the offense, you must coordinate:
   a. Lateral distance between all attacking elements.
   b. Movement routes, to ensure that mutual support by fire or maneuver can be maintained between the lead elements.
   c. Visual signals such as arm-and-hand signals and pyrotechnics.
   d. Radio call signs.
3. Coordinate in the Defense. In the defense, you must coordinate to ensure that there are no gaps, and that fires interlock and are mutually supporting. Information coordinated includes:
   a. Location of positions (primary, alternate, and supplementary).
   b. Dead space between units.
   c. Locations of observation posts (OPs).
   d. Signals.
   e. Patrols and ambushes (size, type, time of departure and return, and routes).
   f. Locations and types of obstacles.
   g. Boundaries.
   h. Control measures.
4. Allocate Final Protective Fire. If a mortar or artillery final protective fire is allocated to the platoon-sized elements, it must be coordinated with the fire support team (FIST) forward observer (FO) and integrated into the fire plan for the element.

Evaluation Preparation: SETUP: In the defense, provide a field location with varying terrain, two adjacent element leaders, and the last fighting position for each of the flanking elements. In the offensive, provide a field location with varying terrain, and two element leaders from adjacent platoons.

BRIEF SOLDIER: Tell the soldier that he is the center platoon leader and must coordinate with both adjacent element leaders.

Performance Measures	**GO**	**NO GO**
1. Coordinated with adjacent element leaders for offensive operations. a. Lateral distance between attaching elements. b. Movement routes. c. Visual signals. d. Radio call signs. e. Boundaries. f. Control measures.	____	____

Performance Measures	GO	NO GO
2. Coordinated with adjacent leaders for defensive operations. a. Location of primary position. b. Location of alternate position. c. Location of supplementary position. d. Dead space between units. e. Locations of OPs. f. Signals. g. Patrols and ambushes. h. Locations and types of constructed obstacles. i. Boundaries. j. Control measures.	____	____

Evaluation Guidance: Score the soldier GO if all performance measures are passed. Score the soldier NO-GO if any performance measure is failed. If the soldier scores NO-GO, show the soldier what was done wrong and how to do it correctly.

References

Required	Related
FM 71-1	
FM 7-7	
FM 7-7J	
FM 7-8	

Perform Duties as Convoy Commander

551-721-4326

Conditions: You are required to perform duties as a convoy commander. Given an alert notification of a convoy move, AR 55-162, a specified number of vehicles, personnel, convoy commander's briefing, and the task to command a convoy.

Standards: The convoy commander must ensure that personnel are briefed on convoy operations; there are ample vehicles and personnel to transport cargo; all support elements are informed of the date and time of the convoy; all orders are brief and to the point; proper reconnaissance is carried out; and vehicles are correctly lined up according to cargo, size, and use.

Performance Steps

1. Start initial planning steps.
    a. Alert unit operation.
    b. Review operation order.
        (1) Determine the number of vehicles needed.
        (2) Break columns down into manageable groups of 20 vehicles or less.
        (3) Determine requirements needed for given situation.
        (4) Divide march column in three parts: Head, main body and trail.
            (a) Head - The first task vehicle or pace setter.
            (b) Main Body - Troop carrying, equipment and/or supply vehicles.
            (c) Trail - Wrecker, maintenance and medical support vehicles/teams are located here. Trail officer/noncommissioned officer is responsible for maintenance and medical support.

2. Schedule convoy commander's briefing with the battalion operations officer (S3).
    a. Determine which unit will provide security.
    b. Find out who will be the security elements commander.
    c. Discuss any topic not covered or not clear.
    d. Discuss the threat to include target acquisition and intelligence which may impact on convoy success.

3. Commander's briefing.
    a. Take notes.
    b. Update maps if appropriate.

4. Prepare convoy commander's checklist.
    a. Items supervisors and drivers need to be briefed on:
        (1) Rules of the road.
        (2) Traffic laws or regulations.
        (3) Speed limits.
        (4) Time and distance gaps.
        (5) Routing plans.
        (6) Schedules.
        (7) March discipline.

5. Map reconnaissance.
    a. Select tentative check points or confirm already established check points.
    b. Contact those units whose combat areas they will be passing through, and find out about trouble areas and ambush sites.

6. Ground reconnaissance.
    a. Select sites for scheduled halts, mess, and refueling that will safely accommodate convoy personnel and equipment.
    b. Select release point.

Performance Steps

c. Identify problem areas along the route.
d. Select a bypass or alternate route.

7. Review the reconnaissance map and make a final selection.

8. Give a copy of the map with all convoy information marked on it to the battalion S3.
   a. Request convoy clearance from the battalion S3.
   b. Request copy of movement graphs from the battalion S3.

9. Coordinate to obtain artillery support with the artillery unit.
   a. Information from the security officer or obtained by route reconnaissance can be used to plan fire support.
   b. Determine the type of ammunition to be fired under various conditions.
   c. Determine the number of rounds to be fired at given targets.
   d. Determine the types of targets which warrant fire missions.

10. Mark on the map the range limitations of each artillery unit.

11. Plan/coordinate with the escort and security elements (military police units) for convoy security.
   a. Maintain noise and light discipline.
   b. Maintain front, flank, and rear security.
   c. Conduct security measures during halts.
   d. Request air cover (as required).
   e. Request fire support (as required).
   f. Maintain convoy communication.

12. Direct the placement of guides and signs along the convoy route.
   a. The authority in charge of movement has responsibility for placing guides and signs.
   b. Guides and signs can be used to direct the convoy.

13. Brief/issue work assignments to subordinate elements.

14. Direct the operation section to prepare strip maps and/or overlays (as required).

15. Prepare for vehicle movement.
   a. Perform vehicle preventive maintenance checks and services (PMCS).
      (1) Perform before operation PMCS using the appropriate -10 level manual.
      (2) Check for and have items repaired, filled or adjusted as needed.
   b. Mark vehicles for the convoy move.
      (1) Place a "Convoy Follows" sign on the first task vehicle below the windshield in a conspicuous location.
      (2) Place a "Convoy Ahead" sign on the rear of the last task vehicle.
      (3) Identify the lead vehicle with a 12- by 18-inch blue flag on the left (driver's) side.
      (4) Identify the convoy commander and the serial commander with a 12- by 18-inch black and white (divided diagonally) flag on the left (driver's) side.
      (5) Identify the last vehicle with a 12- by 18-inch green flag on the left (driver's) side.
      (6) Identify vehicles with a convoy identification number.
      (7) Ensure that all vehicles are marked in accordance with AR 55-162.
   c. Establish convoy communications.
      (1) Radio is the best communication during convoy.
      (2) Remember radio signals can be intercepted.
   d. Load cargo and equipment onto vehicles/ trailers or semitrailers (as required).
   e. Assemble inspection area.
      (1) Ensure the area is large enough to accommodate vehicles.
      (2) Ensure that vehicles are inspected by the maintenance team in the assembly area.
      (3) Ensure that all personnel and equipment are inspected in the assembly area.

16. Prepare the convoy briefing on the following:

Performance Steps

a. Rules of the road.
b. Traffic laws or regulations.
c. Speed limits.
d. Time and distance gaps.
e. Routing plans.
f. Schedules.
g. March discipline.

17. Hand out strip maps and brief convoy personnel.
18. Give signal/order to start engines.
19. Give signal/order to move out.
20. Maintain organizational control by-
    a. Monitoring communication.
    b. Maintaining communication with subordinate element commanders.
    c. Making on-the-spot corrections.
    d. Informing subordinate element commanders of control infractions and ordering then to take corrective actions.
21. Direct at-halt activities, monitor activities in progress, and make on-the-spot corrections.
22. Give signal/order to reform and start engines.
23. Give signal/order to move out.
24. Direct the off-loading of cargo/equipment at the release point, as required.
25. Inform higher headquarters of the convoy status.
26. Inform fire support unit(s) of the convoy status.
27. Evaluate task performance, noting personnelÄ
    a. To be acknowledged for outstanding work performance.
    b. To be acknowledged for substandard work performance and/or scheduled for training.
28. Prepare convoy command's report and give a copy to higher headquarters.

Evaluation Preparation: Setup: Evaluate this task during a field training exercise or normal training session. Provide the soldier with the items listed in the conditions statement.

Brief Soldier: Tell the soldier he will be evaluated on his ability to properly perform duties as a convoy commander.

Performance Measures	**GO**	**NO GO**
1. Started initial planning steps. a. Alerted unit operation. b. Reviewed operation order.	____	____
2. Scheduled convoy commander's briefing with the battalion S3 officer.	____	____
3. Attended convoy commander's briefing, tooks notes, and updated maps.	____	____
4. Prepared convoy commander's checklist.	____	____
5. Conducted a map reconnaissance to select and marked routes/sites not dictated by higher headquarters.	____	____

Performance Measures	GO	NO GO
6. Conducted a ground reconnaissance if time permited and noted on the map clearances of overhead structures/obstacles; load classifications; speed limits; and rest, mess, and refueling sites that would safely accommodate convoy personnel and equipment.	____	____
7. Reviewed reconnaissance map and made final selection of primary and alternate routes, and rest, mess, and refueling areas.	____	____
8. Gave a copy of the map with all convoy information marked on it to the battalion S3 and requested a clearance if not already initiated. Also requested that the move be plotted and a copy of the movement graph be issued.	____	____
9. Coordinated to obtain artillery support with artillery unit.	____	____
10. Marked on the map the range limitations of each artillery unit.	____	____
11. Planned/coordinated with the escort and security elements (military police units) security fire support, air support, and convoy communications needs.	____	____
12. Directed the placement of guides and signs along the convoy route.	____	____
13. Issued work assignments to subordinate element commanders and briefed them on performance standards required.	____	____
14. Directed the operation section to prepare strip maps and/or overlays (as required).	____	____
15. Prepared for vehicle movement. a. Performed vehicle PMCS. b. Marked vehicles for convoy move. (1) Placed "Convoy Follows" sign on the first task vehicle below the windshield in a conspicuous location. (2) Placed "Convoy ahead" on the rear of the last task vehicle. (3) Identified the lead vehicle with a 12- by 18-inch blue flag on the left (driver's) side. (4) Identified convoy commander and serial commander with a 12- by 18-inch black and white (divided diagonally) flag on the left (driver's) side. (5) Identified the last vehicle with a 12- by 18-inch green flag on the left (driver's) side. (6) Identified vehicles with convoy identification number. (7) Ensured that all vehicles are marked in accordance with AR 65-162. c. Established convoy communications. d. Loaded cargo and equipment onto vehicles/ trailers or semitrailers (as required). e. Assembled inspection area. (1) Ensured that vehicles were inspected by the maintenance team in the assembly area. (2) Ensured that all personnel and equipment were inspected in the assembly area.	____	____
16. Prepared the convoy briefing.	____	____
17. Handed out strip maps and briefed convoy personnel on the situation, mission, execution, administration and logistics, and safety.	____	____
18. Gave signal/order to start engines.	____	____
19. Gave signal/order to move out.	____	____

Performance Measures	GO	NO GO
20. Maintained organizational control by- a. Monitoring communication. b. Maintaining communication with subordinate element commanders. c. Making on-the-spot correction. d. Informing subordinate commanders of control infractions and ordering them to take corrective actions.	____	____
21. Directed at-halt activities, monitored activities in progress, and made on-the-spot corrections.	____	____
22. Gave signal/order to reform and start engines.	____	____
23. Gave signal/order to move out.	____	____
24. Directed the off-loading of cargo/ equipment at release point, as required.	____	____
25. Informed higher headquarters of the convoy status.	____	____
26. Informed fire support unit(s) of the convoy status.	____	____
27. Evaluated task performance, noting personnel- a. To be acknowledged for outstanding work performance. b. To be acknowledged for substandard work performance and/or scheduled for training.	____	____
28. Prepared convoy command's report and gave a copy to higher headquarters.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO-GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.